



Data Quality Evaluation and Data Extraction Information for Physical and Chemical Properties for Octamethylcyclotetrasiloxane (D4)

Systematic Review Support Document for the Draft Risk Evaluation

CASRN: 556-67-2

September 2025

This supplemental file contains information regarding the data extraction and evaluation results for data sources that were considered for the *Draft Risk Evaluation for Octamethylcyclotetrasiloxane (D4)* and that underwent systematic review. EPA used the TSCA systematic review process described in the *Draft Systematic Review Protocol Supporting TSCA Risk Evaluations for Chemical Substances* (also referred to as the '2021 Draft Systematic Review Protocol'). The systematic review steps are further described in the *Draft Systematic Review Protocol for Octamethylcyclotetrasiloxane (D4)*. EPA conducted data extractions and data quality evaluations based on author-reported descriptions and results; additional analyses (e.g., statistical analyses) potentially conducted by EPA are not contained in this supplemental file. Additionally, the overall quality determination (OQD) for each reference represents the data as a whole for each study and not for individual metric domains within a study.

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6834323	Fuller, J., White, D., Yi, H., Colley, J., Vickery, Z., Liu, S. (2020). Analysis of volatile compounds causing undesirable odors in a polypropylene - high-density polyethylene recycled plastic resin with solid-phase microextraction. Chemosphere 260:127589.	17
6982832	NCBI, (2021). PubChem database: compound summary: Octamethylcyclotetrasiloxane.	18
6982970	O'Neil, M. J. (2013). Octamethylcyclotetrasiloxane. :1255.	20
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6835590	Abbas, R., Schedemann, A., Ihmels, C., Enders, S., Gmehling, J. (2011). Measurement of thermophysical pure component properties for a few siloxanes used as working fluids for organic rankine cycles. Industrial and Engineering Chemistry Research 50(16):9748-9757.	22
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3569075	Palczewska-Tulinska, M., Oracz, P. (2005). Selected physicochemical properties of hexamethylcyclotrisiloxane, octamethylcyclotetrasiloxane, and decamethylcyclopentasiloxane. Journal of Chemical and Engineering Data 50(5):1711-1719.	75
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4279677	Zhang, Y., Dong, H., Wu, C., Yu, L., Xu, J. (2015). The mixing properties of 1,3,5-trimethyl-1,3,5-tris(3,3,3-trifluoropropyl) cyclotrisiloxane with various organosilicon compounds at different temperatures. Journal of Chemical Thermodynamics 81:16-25.	81
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7303416	Kochetkov, A., Smith, J. S., Ravikrishna, R., Valsaraj, K. T., Thibodeaux, L. J. (2001). Air-water partition constants for volatile methyl siloxanes. Environmental Toxicology and Chemistry 20(10):2184-2188.	85
2629388	Lei, Y. D., Wania, F., Mathers, D., an (2010). Temperature-Dependent Vapor Pressure of Selected Cyclic and Linear Polydimethylsiloxane Oligomers. Journal of Chemical and Engineering Data 55(12):5868-5873.	86
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logKow		
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2188633	Xu, S., Kropscott, B. (2012). Method for simultaneous determination of partition coefficients for cyclic volatile methylsiloxanes and dimethylsilanediol. Analytical Chemistry 84(4):1948-1955.	115

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2535012	Xu, S., Kropscott, B. (2014). Evaluation of the three-phase equilibrium method for measuring temperature dependence of internally consistent partition coefficients (KOW, KOA, and KAW) for volatile methylsiloxanes and trimethylsilanol. Environmental Toxicology and Chemistry 33(12):2702-2710.				
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7303416	Kochetkov, A., Smith, J. S., Ravikrishna, R., Valsaraj, K. T., Thibodeaux, L. J. (2001). Air-water partition constants for volatile methyl siloxanes. Environmental Toxicology and Chemistry 20(10):2184-2188.	130			
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6834101	Sousa, J. V., Mcnamara, P. C., Putt, A. E., Machado, M. W., Surprenant, D. C., Hamelink, J. L., Kent, D. J., Silberhorn, E. M., Hobson, J. F. (1995). Effects of octamethylcyclotetrasiloxane (OMCTS) on freshwater and marine organisms. Environmental Toxicology and Chemistry 14(10):1639-1647.	138			
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7996867	U.S. EPA, (2021). Chemistry dashboard information for Dimethylsilanediol. CAS registry number: 1066-42-8.	146			
6984031	Varaprath, S., Frye, C. L., Hamelink, J. (1996). Aqueous solubility of permethylsiloxanes (silicones). Environmental Toxicology and Chemistry 15(8):1263-1265.	148			
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7995011	Elsevier, (2021). Reaxys: physical-chemical property data for dimethylsilanediol. CAS Registry Number: 1066-42-8.	
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5982970	O'Neil, M. J. (2013). Octamethylcyclotetrasiloxane. :1255.	166
5982833	RSC, (2020). ChemSpider: Octamethylcyclotetrasiloxane.	
1279677	Zhang, Y., Dong, H., Wu, C., Yu, L., Xu, J. (2015). The mixing properties of 1,3,5-trimethyl-1,3,5-tris(3,3,3-trifluoropropyl) cyclotrisilox-ane with various organosilicon compounds at different temperatures. Journal of Chemical Thermodynamics 81:16-25.	169
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2803124	Hamelink, J. L., Simon, P. B., Silberhorn, E. M. (1996). Henry's law constant, volatilization rate, and aquatic half-life of octamethylcy-clotetrasiloxane. Environmental Science & Technology 30(6):1946-1952.	
7303416	Kochetkov, A., Smith, J. S., Ravikrishna, R., Valsaraj, K. T., Thibodeaux, L. J. (2001). Air-water partition constants for volatile methyl siloxanes. Environmental Toxicology and Chemistry 20(10):2184-2188.	183
5982832	NCBI, (2021). PubChem database: compound summary: Octamethylcyclotetrasiloxane.	184
5889409	Services,, A.A., Inc., (2000). Phase II studies of the Henry's law constant of OMCTS (octamethylcyclotetrasiloxane).	186
5889489	Services,, A.A., Inc., (1990). Henry's law constant of OMCTS (octamethylcyclotetrasiloxane) at 20 degrees.	189

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List of Abbreviations and Acronyms for Data Quality Evaluation and Extraction Tables

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9960764	Compton, K. L. (2019). Dietary biotransformation and bioaccumulation of cyclic siloxanes in rainbow trout (Oncorhynchus mykiss).	196
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2535012	Xu, S., Kropscott, B. (2014). Evaluation of the three-phase equilibrium method for measuring temperature dependence of internally consistent partition coefficients (KOW, KOA, and KAW) for volatile methylsiloxanes and trimethylsilanol. Environmental Toxicology and Chemistry 33(12):2702-2710.	203

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Study Citation: OECD Harmonized	DOE, (2016). T Physical Form of	Table 1: Chemicals of concern and associator State	ted chemical inf	formation. PACs.
Template: HERO ID:	3981013			
			EXTRACTIO	N
Parameter		Data		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and C	Guideline	none; not specified; not specified		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State, a		NR; NR; NR Notes: NR		
Results Value	·	liquid		
Results Details		not specified		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review; specific source not reported.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: primary reference not specified but include CRC (2009), HSDB (no date), Merck (2006), SAX (2012)

Study Citation: OECD Harmonized	Elsevier, (2021 Physical Form		a for tetramethy	l-1,3-disiloxanediol. CAS Registry Number: 1118-15-6.	
Template: HERO ID:	7994661				
			EXTRACTIO	N	
Parameter		Data			
CASRN and Test Material		1118-15-6; Tetramethyldisiloxanediol			
Confidentiality, Type, and		None; Experimental; Not Reported			
Solvent, Reactivity, Storag		NR; NR; NR			
Radiolabel, Source, State,		NR; NR; NR; NR			
Results Value	•	3 values reported in Reaxys: 2 values wer	re monoclinic crys	stal system (solid), 1 value was needle crystal shape (solid)	
Results Details		Not Reported			
			EVALUATIO	N	
Domain		Metric	Rating	Comments	
Domain 1: Substance					
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.	
Domain 2: Test Reliabil	lity				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	N/A	Rating of this factor is not applicable to this kind of information.	
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.	
Domain 3: Other					
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	

 $^{^{\}star}$ Related References: Hyde 1953; Kakudo et al. 1953; Kakudo et al 1953.

Study Citation: OECD Harmonized	Elsevier, (2021) Physical Form		a for dimethylsi	lanediol. CAS Registry Number: 1066-42-8.	
Template: HERO ID:	7995011				
			EXTRACTIO	N .	
Parameter		Data			
CASRN and Test Material		1066-42-8; Dimethylsilanediol			
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported			
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR			
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR			
Results Value		2 values reported in Reaxys; crystal phase	e - interplanar spa	cing and leafs	
Results Details		Not Reported			
			EVALUATIO	N	
Domain		Metric	Rating	Comments	
Domain 1: Substance					
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.	
Domain 2: Test Reliabil	lity				
	Metric 3:	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information.	
		(Method Objectivity)			
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.	
Domain 3: Other					
Zonan J. One	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Quali	Overall Quality Determination High				

^{*} Related References: Hyde; Journal of the American Chemical Society; vol. 75; (1953); p. 2166

Study Citation: OECD Harmonized	NCBI, (2021). Physical Form of	PubChem database: compound summary: (or State	Octamethylcyc	lotetrasiloxane.
Template: HERO ID:	6982832			
		1	EXTRACTIO	N
Parameter		Data		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Results Value		oily liquid		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
2 smain of Guidi	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: O'Neil, M.J. (ed.). The Merck Index - An Encyclopedia of Chemicals, Drugs, and Biologicals. Cambridge, UK: Royal Society of Chemistry, 2013., p. 1255

EXTRACTION

HERO ID: 6982832 Table: 2 of 2

Study Citation:
OECD Harmonized

NCBI, (2021). PubChem database: compound summary: Octamethylcyclotetrasiloxane.

Physical Form or State

Data

Template: **HERO ID:**

Parameter

6982832

Overall Quality Determination

CASRN and Test Material Confidentiality, Type, and Guide Solvent, Reactivity, Storage, and Radiolabel, Source, State, and Po Results Value	Stability	556-67-2; Octamethylcyclotetrasiloxane None; Experimental; Not Reported NR; NR; NR; NR NR; NR; NR smooth, viscous liquid		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
Me	etric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Me	etric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliability				
Me	etric 3:	Reliability/Unbiased (Method Objectivity)	N/A	Rating of this factor is not applicable to this kind of information.
Me	etric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
	etric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
Me	etric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

High

^{*} Related References: Lewis, R.J. Sr.; Hawley's Condensed Chemical Dictionary 15th Edition. John Wiley & Sons, Inc. New York, NY 2007., p. 918

HERO ID: 6982970 Table: 1 of 1

Study Citation:
OECD Harmonized

O'Neil, M. J. (2013). Octamethylcyclotetrasiloxane. :1255.

Physical Form or State

Template:

HERO ID: 6982970

		EXTRACTION
Parameter	Data	

CASRN and Test Material 556-67-2; Octamethylcyclotetrasiloxane Confidentiality, Type, and Guideline None; Experimental; Not Reported

Solvent, Reactivity, Storage, and Stability NR; NR; NR; NR Radiolabel, Source, State, and Purity NR; NR; NR; NR Results Value liquid Results Details Not Reported

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliab	oility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

nıgıı

Study Citation: OECD Harmonized	RSC, (2020). C Physical Form of	hemSpider: Octamethylcyclotetrasiloxane or State).	
Template: HERO ID:	6982833			
			EXTRACTIO)N
Parameter		Data		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and C	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	nd Purity	NR; NR; NR; NR		
Results Value		liquid		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	y Determi	nation	High	

^{*} Related References: OU Chemical Safety Data

Template: HERO ID:	7994661			
			EXTRACTIO	N
Parameter		Data		
CASRN and Test Material		1118-15-6; Tetramethyldisiloxanediol		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Results Details		1 property reported in Reaxys: color - wh	nite.	
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 4:	(Method Objectivity) Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
Zemmi J. Gulei	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Lucas; Martin; Journal of the American Chemical Society; vol. 74; (1952); p. 5225, View in Reaxys; GmelinHandbuch der Anorganischen Chemie; vol. Si: MVol.C; 91, page 248 - 251; (from Gmelin)

Overall Quality Determination

Study Citation: Fuller, J., White, D., Yi, H., Colley, J., Vickery, Z., Liu, S. (2020). Analysis of volatile compounds causing undesirable odors in a podensity polyethylene recycled plastic resin with solid-phase microextraction. Chemosphere 260:127589. OECD Harmonized Physical Form or State				
Template: HERO ID:	6834323			
TIERO ID:	003 1323		EXTRACTION	
Parameter		Data	EATRACTION	
CASRN and Test Materia	1	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and		none; Experimental; Not reported		
Solvent, Reactivity, Storag		NR; NR; NR		
Radiolabel, Source, State,	•	no; Fisher Scientific (Waltham, MA, USA)); NR; NR	
Results Details	·	D4 does not have an odor. [qualitative desc	cription that was not th	ne focus of the primary source]
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	The odor intensity was determined qualitatively by pretrained people based on a 1 to 10 scale.
	Metric 4:	Reliability/Analytical Method	Low	Odor assessment was not the focus of the primary study, and only qualitative determination was used.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Medium

HERO ID: 6982832 Table: 1 of 2

Study Citation: OECD Harmonized	NCBI, (2021). Physical Form	PubChem database: compound summary: Ocor State	tamethylcyclotetrasiloxane.	
Template: HERO ID:	6982832			
-			EXTRACTION	
Parameter		Data		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storag	ge, and Stability	NR; NR; NR		
Radiolabel, Source, State,		NR; NR; NR; NR		
Results Details		dry powder; liquid		
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	Uninformative	Measured data are not consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors. It is not likely to be a powder with a melting point of 18°C.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination

Uninformative

^{*} Related References: EPA Chemicals under the TSCA

HERO ID: 6982832 Table: 2 of 2

Study Citation:
OECD Harmonized

NCBI, (2021). PubChem database: compound summary: Octamethylcyclotetrasiloxane.

Physical Form or State

	THE STATE OF THE S	EXTRACTIO	N
Parameter	Data		- '
CASRN and Test Material Confidentiality, Type, and Guideline Solvent, Reactivity, Storage, and Stability Radiolabel, Source, State, and Purity Results Details	556-67-2; Octamethylcyclotetrasiloxane none; Experimental; Not reported NR; NR; NR; NR NR; NR; NR NR; NR; NR colorless, oily liquid		
	I	EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	N/A	Rating of this factor is not applicable to this kind of information.
Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.

High

N/A

The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and

Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Databases

Models

Metric 5:

Metric 6:

^{*} Related References: ILO International Chemical Safety Cards (ICSC)

HERO ID: 6982970 Table: 1 of 1

Study Citation: OECD Harmonized O'Neil, M. J. (2013). Octamethylcyclotetrasiloxane. :1255.

ECD Harmonized Physical Form or State

Template:

HERO ID: 6982970

EVTD	ACTION
CAIN	ACTION

Parameter	Data
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane
Confidentiality, Type, and Guideline	none; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR
Results Details	oily liquid

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliab	bility			
	Metric 3:	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information.
		(Method Objectivity)		
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qual	lity Determi	ination	High	

HERO ID: 6982833 Table: 1 of 1

Study Citation: OECD Harmonized	RSC, (2020). C Physical Form of	hemSpider: Octamethylcyclotetrasiloxane or State	2.	
Template: HERO ID:	6982833			
			EXTRACTIO)N
Parameter		Data		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Results Details		colorless liquid		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: OU Chemical Safety Data

Study Citation:	Abbas, R., Schedemann, A., Ihmels, C., Enders, S., Gmehling, J. (2011). Measurement of thermophysical pure component properties for a few silox used as working fluids for organic rankine cycles. Industrial and Engineering Chemistry Research 50(16):9748-9757.						
OECD Harmonized	Melting Point	g		6 · · · · · · · · · · · · · · · · · · ·			
Template:	-						
HERO ID:	6835590						
			EXTRACTIO	N			
Parameter		Data					
Melting Point		291.12 K					
CASRN and Test Material	l	556-67-2; D4					
Confidentiality, Type, and		none; Experimental; None; differential s	canning calorimete	ers ("DSC 0100")			
Solvent, Reactivity, Storag		Not Reported; Not Reported; Not Report	-	AS (DOC VIOV)			
Radiolabel, Source, State,	•	Not Reported; Wacker Chemie AG; Not					
Results Details Methods	and runty	Not Reported	10 portion, / 79.0 /				
Standard Deviation Result	·c	Not Reported					
Results Details	.3	Not Reported					
			EVALUATIO				
Domain		Metric	Rating	Comments			
Domain 1: Substance							
	Metric 1:	Representativeness	High	Data are measured for the subject chemical substance.			
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) and/or other physical/chemical properties.			
Domain 2: Test Reliabi	lity						
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.			
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.			
Domain 3: Other							
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.			
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.			
0	4 D-4 '		TT! - 1				
Overall Quali	ıy Determi	nauon	High				

Study Citation: OECD Harmonized	DOE, (2016). T Melting Point	Cable 1: Chemicals of concern and associate	ted chemical inf	formation. PACs.
Template:	intenting rount			
HERO ID:	3981013			
			EXTRACTIO	N
Parameter		Data		
Melting Point		17.5 - °C		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	none; not specified; none		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR Notes: NR		
Results Details Methods		not reported		
Standard Deviation Results	s	not reported		
Results Details		not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review; specific source not reported.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

^{*} Related References: primary reference not specified but include CRC (2009), HSDB (no date), Merck (2006), SAX (2012)

Study Citation: OECD Harmonized	Elsevier, (2019 Melting Point). Reaxys: physical-chemical property data	ta for octamethyl	lcyclotetrasiloxane. CAS Registry Number: 556-67-2			
Template: HERO ID:	6984075						
			EXTRACTIO	N			
Parameter		Data					
Melting Point		17 - 18.5 °C					
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane					
Confidentiality, Type, and	Guideline	None; Experimental; Not reported					
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR					
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR					
Results Details Methods			xys; 14 values were	e in the range of 17-18.5°C; 1 value was outside this range			
Standard Deviation Results	s	Not reported	Not reported				
Results Details		15 values were reported in Reaxys; 14 va	rted in Reaxys; 14 values were in the range of 17-18.5°C; 1 value was outside this range.				
			EVALUATIO	N			
Domain		Metric	Rating	Comments			
Domain 1: Substance							
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.			
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.			
Domain 2: Test Reliabil	lity						
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.			
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.			
Domain 3: Other							
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.			
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.			
Overall Quali	tv Determi	ination	High				

^{*} Related References: Data range determined from multiple primary sources in REAXYS.

Study Citation: OECD Harmonized	Elsevier, (2021). I Melting Point	Reaxys: physical-chemical property data	a for 1,1,3,3,5,5,	7,7-octamethyltetrasiloxane-1,7-diol. CAS Registry Number: 3081-07-0.
Template: HERO ID:	7991715			
			EXTRACTIO	N
Parameter		Data		
Melting Point CASRN and Test Material		-5 °C 3081-07-0; Octamethyltetrasiloxanediol		
Confidentiality, Type, and C	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage		NR; NR; NR; NR		
Radiolabel, Source, State, a	•	NR; NR; NR; NR		
Results Details Methods	•	Not Reported		
Standard Deviation Results		Not reported		
Results Details		Not reported		
			EVALUATION	N
Domain		Metric	Rating	Comments
Domain 1: Substance			8	20000000
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties or
				behaviors.
Domain 2: Test Reliabili	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	y Determin	ation	High	

^{*} Related References: Zhurnal Obshchei Khimii; vol. 29; (1959); p. 258,261, 263; engl. Ausg. S. 262, 265, 266,

Study Citation: OECD Harmonized	Elsevier, (2021) Melting Point). Reaxys: physical-chemical property data	a for 1,1,3,3,5,5	hexamethyltrisiloxane-1,5-diol. CAS Registry Number: 3663-50-1.
Template: HERO ID:	7992314			
			EXTRACTIO	N
Parameter		Data		
Melting Point		-231.9 °C		
CASRN and Test Material		3663-50-1; Hexamethyltrisiloxanediol		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Results Details Methods		Not Reported		
Standard Deviation Results	S	Not reported		
Results Details		2 values were reported in Reaxys.		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	tv Determi	nation	High	

^{*} Related References: Patent; Union Carbide; FR1399256; (1965); (A); Chem. Abstr.; vol. 63; nb. 16383e; (1965); Chem. Abstr.; vol. 63; nb. 16383e; (1965); Sokolow; Zhurnal Obshchei Khimii; vol. 29; (1959); p. 258,261, 263; engl. Ausg. S. 262, 265, 266,

Study Citation: OECD Harmonized	Elsevier, (2021) Melting Point). Reaxys: physical-chemical property dat	a for tetramethy	1-1,3-disiloxanediol. CAS Registry Number: 1118-15-6.
Template: HERO ID:	7994661			
			EXTRACTIO	N
Parameter		Data		
Melting Point		62 - 68 °C		
CASRN and Test Material		1118-15-6; Tetramethyldisiloxanediol		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Results Details Methods		Not Reported		
Standard Deviation Results	S	Not reported		
Results Details		19 values were reported in Reaxys; 8 value with the test substance in a solvent	ies were in the rang	ge of 62 - 68°C; one value was outside of this range (121 deg C); 9 values were reported
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

^{*} Related References: Makarova et al. 2006; Lucas 1952; Cella et al. 1994; Cypryk et al. 1993; Lickiss et al. 1993; Zachernyuk et al. 1985; Lebedev et al. 1979; Martyakova et al. 1976; Baratova et al. 1975; Andrianov 1974; Ungurenasu 1961; Borisow et al. 1966; Barnes 19666.....

Study Citation: OECD Harmonized Template:	Elsevier, (2021) Melting Point). Reaxys: physical-chemical property da	ta for dimethylsi	lanediol. CAS Registry Number: 1066-42-8.
HERO ID:	7995011			
			EXTRACTIO	N
Parameter		Data		
Melting Point		94.5 - 101 °C		
CASRN and Test Material		1066-42-8; Dimethylsilanediol		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storag	ge, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Results Details Methods		Not Reported		
Standard Deviation Result	S	Not reported		
Results Details		10 values were reported in Reaxys; The	test substance was	dissolved in a solvent for 6 values. Decomposition was reported at 99 - 100°C.
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features
				(e.g., presence of certain functional groups) or other physical/chemical properties or behaviors.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	tv Determi	nation	High	

^{*} Related References: Makarova et al. 2006; Kennan et al. 1999; Cella and Carpenter 1994; Harris 1963; Chrzczonowicz et al. 1960; Takiguchi 1959; Kantor 1953; Hyde 1953; Hyde 1953

Study Citation: OECD Harmonized	Haynes, W. M. Melting Point	(2014). 1,1,3,3-Tetramethyl-1,3-disiloxar	nediol. :3-506.	
Template: HERO ID:	7998725			
			EXTRACTIO	N
Parameter		Data		
Melting Point		66 °C		
CASRN and Test Material		1118-15-6; Tetramethyldisiloxanediol		
Confidentiality, Type, and C	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Results Details Methods		Not Reported		
Standard Deviation Results		Not reported		
Results Details		Not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	ity.			
Domain 2. 16st Kendun	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation:
OECD Harmonized

Haynes, W.,.M. (2014). Octamethylcyclotetrasiloxane. :3-424.

Melting Point

			EXTRACTIO	N
Parameter		Data		
Melting Point		17.10 °C		
CASRN and Test Mater	ial	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, ar	nd Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Stor		NR; NR; NR		
Radiolabel, Source, Stat	-	NR; NR; NR; NR		
Results Details Methods	•	Not Reported		
Standard Deviation Resu	ults	Not reported		
Results Details		Not reported		
			EVALUATIO	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or
				other physical/chemical properties or behaviors.
Domain 2: Test Relia	bility			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's
				inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain J. Outel	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are
	Medic 5.	Databases	111511	peer-reviewed by experts in the field, are broadly available to the public for review and
				use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination

High

Study Citation: OECD Harmonized	NCBI, (2021). Melting Point	PubChem database: compound summary:	Octamethylcycl	otetrasiloxane.
Template: HERO ID:	6982832			
			EXTRACTIO	N
Parameter		Data		
Melting Point		17.5 °C		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Results Details Methods		Not Reported		
Standard Deviation Results	3	Not reported		
Results Details		Not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	itv			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	Overall Quality Determination			

^{*} Related References: EPA DSSTox; Hazardous Substances Data Bank (HSDB); ILO International Chemical Safety Cards (ICSC)

Study Citation:	O'Neil, M. J. (2013). Octamethylcyclotetrasiloxane. :1255.
OECD Harmonized	Melting Point

Template: HERO ID: 6982970				
EXTRACTION				
Parameter	Data			
Melting Point	17.5 °C			
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane			
Confidentiality, Type, and Guideline	None; Experimental; Not reported			
Solvent, Reactivity, Storage, and Stability	NR; NR; NR			
Radiolabel, Source, State, and Purity	NR; NR; NR; NR			
Results Details Methods	Not Reported			
Standard Deviation Results	Not reported			
Results Details	Not reported			
		EVALUATIO	N	
Domain	Metric	Rating	Comments	
Domain 1: Substance				
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.	
Domain 2: Test Reliability				
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.	
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.	
Domain 3: Other				
Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are	

Overall Quality Determination	High
5 , 01 min & 02001101 = 0001 111111001011	8

Models

Metric 6:

N/A

peer-reviewed by experts in the field, are broadly available to the public for review and

Rating of this factor is not applicable to this kind of information.

Study Citation: OECD Harmonized	RSC, (2020). C Melting Point	ChemSpider: Octamethylcyclotetrasiloxane		
Template: HERO ID:	6982833			
			EXTRACTIO	N .
Parameter		Data		
Melting Point		17.5 °C		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Results Details Methods		Not Reported		
Standard Deviation Results	S	Not reported		
Results Details		Not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determination			High	

^{*} Related References: OU Chemical Safety Data (No longer updated)

Study Citation: OECD Harmonized Template:	RSC, (2020). C	hemSpider: Octamethylcyclotetrasiloxane		
HERO ID:	6982833			
			EXTRACTIO	N
Parameter		Data		
Melting Point		17.5 - 18 °C		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Results Details Methods		Not Reported		
Standard Deviation Results	S	Not reported		
Results Details		Not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination

High

^{*} Related References: Jean-Claude Bradley Open Melting Point Dataset

Study Citation:
OECD Harmonized

RSC, (2020). ChemSpider: Octamethylcyclotetrasiloxane.

OECD Harmonized

Melting Point

Template:

		EXTRACTIO	N
Parameter	Data		
Melting Point	17 - 18 °C		
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Results Details Methods	Not Reported		
Standard Deviation Results	Not reported		
Results Details	Not reported		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	(Method Objectivity)		towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.

High

N/A

Data is from a secondary database with a references to the peer-reviewed original

Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Databases

Models

Metric 5:

Metric 6:

^{*} Related References: Alfa Aesar

Analytical method is unknown but is likely to be appropriate based on the data's inclu-

Data is from a secondary database with a references to the peer-reviewed original

sion in a peer-reviewed/recognized database or other secondary source.

Rating of this factor is not applicable to this kind of information.

Study Citation:		ChemSpider: Octamethylcyclotetrasiloxane	•				
OECD Harmonized	Melting Point						
Template:							
HERO ID:	6982833	6982833					
			EXTRACTIO	N			
Parameter		Data					
Melting Point		17 - 18 °C					
CASRN and Test Material	l	556-67-2; Octamethylcyclotetrasiloxane					
Confidentiality, Type, and		None; Experimental; Not reported					
Solvent, Reactivity, Storag		NR; NR; NR					
	•	NR; NR; NR; NR					
Radiolabel, Source, State, and Purity		Not Reported					
Results Details Methods		•					
Standard Deviation Results		Not reported					
Results Details		Not reported					
			EVALUATIO	N			
Domain		Metric	Rating	Comments			
Domain 1: Substance							
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.			
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.			
Di- 2. T+ D-li-Li	1:4						
Domain 2: Test Reliabi	•	D-11-1-114-//II-1-1-1	M - 4:				
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.			
	3.5	(Method Objectivity)	3.6.11	towards a particular product of outcome.			

Medium

High

N/A

Overall Quality Determination High

Databases

Models

Reliability/Analytical Method

Domain 3: Other

Metric 4:

Metric 5:

Metric 6:

^{*} Related References: Oakwood

Study	Citation:
OFCE	Uarmaniza

RSC, (2020). ChemSpider: Octamethylcyclotetrasiloxane.

OECD Harmonized

Melting Point

Template:

HERO ID:	6982833			
			EXTRACTIO	N
Parameter		Data		
Male Div		17, 10.00		
Melting Point	1	17 - 18 °C		
CASRN and Test Materia		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and		None; Experimental; Not reported		
Solvent, Reactivity, Stora		NR; NR; NR		
Radiolabel, Source, State	, and Purity	NR; NR; NR		
Results Details Methods		Not Reported		
Standard Deviation Resul	lts	Not reported		
Results Details		Not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliab	ilitv			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qual	ity Determi	nation	High	

^{*} Related References: LabNetwork

Analytical method is unknown but is likely to be appropriate based on the data's inclu-

Data is from a secondary database with a references to the peer-reviewed original

sion in a peer-reviewed/recognized database or other secondary source.

Rating of this factor is not applicable to this kind of information.

Study Citation: OECD Harmonized	RSC, (2020). O Melting Point	ChemSpider: Octamethylcyclotetrasiloxane.		
Template: HERO ID:	6982833			
		I	EXTRACTIO	N
Parameter		Data		
Melting Point		17 - 18 °C		
CASRN and Test Material	1	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and		None; Experimental; Not reported		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State,	•	NR; NR; NR		
Results Details Methods	Ž	Not Reported		
Standard Deviation Result	S	Not reported		
Results Details		Not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabi	litv			
2. 1000 10011401	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
		<u> </u>		-

Medium

High

N/A

Overall Quality Determination High

Databases

Models

Reliability/Analytical Method

Domain 3: Other

Metric 4:

Metric 5:

Metric 6:

^{*} Related References: Sigma-Aldrich

Study	Citation:
OFCI) Harmaniza

RSC, (2020). ChemSpider: Octamethylcyclotetrasiloxane.

OECD Harmonized

Melting Point

Template: HERO ID: 6982833			
	I	EXTRACTIO	N
Parameter	Data		
Melting Point	17 - 18 °C		
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Results Details Methods	Not Reported		
Standard Deviation Results	Not reported		
Results Details	Not reported		
		EVALUATIO:	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determ	ination	High	

^{*} Related References: Strem Product Catalog: https://www.strem.com/catalog/v/14-5400/

Study Citation: OECD Harmonized	SEHSC, (2020) Melting Point). Request for risk evaluation under the To	oxic Substances (Control Act; Octamethylcyclotetrasiloxane (D4; CASRN: 556-67-2).
Template:				
HERO ID:	7296376			
			EXTRACTIO	N
Parameter		Data		
Maltina Daint		17.7 °C		
Melting Point CASRN and Test Material		556-67-2; Not Reported		
Confidentiality, Type, and	Guidalina	Not Reported; Not Reported; Not Repor	tad	
Solvent, Reactivity, Storage		Not Reported; Not Reported; Not Report		
Radiolabel, Source, State,	-	Not Reported; Not Reported; Not Report	_	
Results Details Methods	and I arrey	Not Reported	ica, rvot reported	
Standard Deviation Results	S	Not Reported		
Results Details		Not Reported		
ъ.		20.0	EVALUATIO	
Domain		Metric	Rating	Comments
Domain 1: Substance	Metric 1:	D	TT: -1.	
	Metric 2:	Representativeness Appropriateness	High High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features.
	Metric 2.	Appropriateness	Tilgii	weasured data are consistent with the subject chemical substance structural readures.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	3.6	(Method Objectivity)	T	towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
2	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality	ty Determi	nation	High	

^{*} Related References: Source cited: HERO ID: 7289280 (duplicates: HERO ID: 7289281, HERO ID: 7330442; not in distiller) - EA09A Brooke D.N., Crookes M.J., Gray D., Robertson S. 2009. Environmental Risk Assessment Report: Octamethylcyclotetrasiloxane. UK Environmental Agency. Source cited: HERO ID: 6990635 (pending retrieval) - CSR18A Chemical Safety Report (CSR). 2018. Chemical safety report – octamethylcyclotetrasiloxane, D4. (CSR18A). Accessed December 2019. Available at: https://echa.europa.eu/substanceinformation/substanceinfo/100.008.307.

Study Citation: OECD Harmonized	U.S. EPA, (2020 Melting Point)). Chemistry dashboard information for (Octamethylcyclo	otetrasiloxane.
Template:	(00000			
HERO ID:	6982826			
			EXTRACTIO	N
Parameter		Data		
Melting Point		17.5 - 18.0 °C		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and C	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Results Details Methods		average of 6 values; range 17.5-18.0°C		
Standard Deviation Results	1	Not reported		
Results Details		17.6°C average of 6 values		
			EVALUATIO	N N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: Data range determined from multiple primary sources in Chemistry Dashboard.

Study Citation: OECD Harmonized	DOE, (2016). T Boiling Point	Table 1: Chemicals of concern and associate	ed chemical inf	ormation. PACs.
Template: HERO ID:	3981013			
			EXTRACTIO	N
Parameter		Data		
Boiling Point		175 - C		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	none; not specified; not specified		
Solvent, Reactivity, Storage		NR; NR; NR; NR		
Radiolabel, Source, State, a	•	NR; NR; NR; NR Notes: NR		
Standard Deviation Results	3	not reported		
Results Details		@ 760 mm Hg		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review; specific source not reported.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: primary reference not specified but include CRC (2009), HSDB (no date), Merck (2006), SAX (2012)

Study Citation: OECD Harmonized	Elsevier, (2019) Boiling Point). Reaxys: physical-chemical property data	ta for octamethyl	lcyclotetrasiloxane. CAS Registry Number: 556-67-2
Template:	6004075			
HERO ID:	6984075			
			EXTRACTIO	N
Parameter		Data		
Boiling Point		170 - 176.4 C		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and C	Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	•	NR; NR; NR; NR		
Standard Deviation Results	3	Not reported		
Results Details		750-760 torr; 28 values were reported in outside this range or measured at unreport		see values were reported in the range of 170 to 176.4°C at 750-760 torr; 9 values were red pressures.
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	tv Determi	nation	High	

^{*} Related References: Data range determined from multiple primary sources in REAXYS.

Study Citation: OECD Harmonized	Elsevier, (2021) Boiling Point). Reaxys: physical-chemical property data	for 1,1,3,3,5,5	7,7-octamethyltetrasiloxane-1,7-diol. CAS Registry Number: 3081-07-0.
Template: HERO ID:	7991715			
			EXTRACTIO	N
Parameter		Data		
Boiling Point		97 - 100 C		
CASRN and Test Material		3081-07-0; Octamethyltetrasiloxanediol		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Standard Deviation Results	3	Not reported		
Results Details		1 value reported in Reaxys at 2 torr		
			EVALUATIO	N .
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	itv			
20111111121 2001 1101111011	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
2	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

^{*} Related References: Andrianov,K.A. et al.; Bulletin of the Academy of Sciences of the USSR Division of Chemical Science; (1962); p. 2144 - 2146; Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya;(1962); p. 2243 - 2245

Study Citation: OECD Harmonized	Elsevier, (2021). Reaxys: physical-chemical property data for 1,1,3,3,5,5,7,7-octamethyltetrasiloxane-1,7-diol. CAS Registry Number: 3081-07-0. Boiling Point
Template:	Boiling Foliat
HERO ID:	7991715

EXTRACTION		
Parameter	Data	
B.W. B.		
Boiling Point	86 - 88 C	
CASRN and Test Material	3081-07-0; Octamethyltetrasiloxanediol	
Confidentiality, Type, and Guideline	None; Experimental; Not Reported	
Solvent, Reactivity, Storage, and Stability	NR; NR; NR	
Radiolabel, Source, State, and Purity	NR; NR; NR	
Standard Deviation Results	Not reported	
Results Details	1 value reported in Reaxys at 0.4 torr	

	EVALUATION					
Domain		Metric	Rating	Comments		
Domain 1: Substance	;					
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties or behaviors.		
Domain 2: Test Relia	bility					
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.		
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.		
Domain 3: Other						
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.		
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		

^{*} Related References: Harris; Journal of the Chemical Society; (1963); p. 5978,5981.

Study Citation: OECD Harmonized Template:	Elsevier, (2021) Boiling Point). Reaxys: physical-chemical property data	ta for 1,1,3,3,5,5	-hexamethyltrisiloxane-1,5-diol. CAS Registry Number: 3663-50-1.
HERO ID:	7992314			
			EXTRACTIO	N
Parameter		Data		
Boiling Point CASRN and Test Material Confidentiality, Type, and Solvent, Reactivity, Storag Radiolabel, Source, State, Standard Deviation Result Results Details	Guideline ee, and Stability and Purity	ž , , , , , , , , , , , , , , , , , , ,	e in the range of 79	- 91 deg C at 2 - 3 torr; the other two were 106 deg C at 6 torr and 72 - 74 deg C at 0.3
		torr.		
ъ.		26.	EVALUATIO	
Domain Domain 1: Substance		Metric	Rating	Comments
Domain 1: Substance	Metric 1: Metric 2:	Representativeness Appropriateness	High High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties or behaviors.
Domain 2: Test Reliabi	lity			
Domain 2. Test Renaul	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Zomani S. Outer	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

^{*} Related References: Zachernyuk et al. 1985; Kaufman et al. 1970; Union Carbide Patent 1965; Harris 1963; Andrianov et al. 1962

Results Details

Study Citation: Haynes, W.,.M. (2014). Octamethylcyclotetrasiloxane. :3-424. OECD Harmonized Boiling Point Template:				
HERO ID:	6982969			
		EXTRACTION		
Parameter		Data		
Boiling Point		175.4 C		
CASRN and Test Material	<u>[</u>	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability		NR; NR; NR; NR		
Radiolabel, Source, State, and Purity		NR; NR; NR; NR		
Standard Deviation Results		Not reported		

Not reported

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Relial	bility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determination			High	

Study Citation: OECD Harmonized Template:	NCBI, (2021). Boiling Point	PubChem database: compound summary:	Octamethylcyc	lotetrasiloxane.
HERO ID:	6982832			
			EXTRACTIO	N
Parameter		Data		
Boiling Point		175.8 C		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Standard Deviation Results	S	Not reported		
Results Details		Not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

^{*} Related References: EPA DSSTox

Domain 3: Other

Study Citation: OECD Harmonized Template:	NCBI, (2021). I Boiling Point	PubChem database: compound summary:	Octamethylcycl	otetrasiloxane.
HERO ID:	6982832			
			EXTRACTIO	N
Parameter		Data		
Boiling Point		74 C		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and Guideline		none; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability		NR; NR; NR; NR		
Radiolabel, Source, State, and Purity		NR; NR; NR; NR		
Standard Deviation Results	S	Not Reported		
Results Details		20 mm Hg		
			EVALUATIO	N .
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.

Overall Quality Determination High

Models

Databases

Metric 5:

Metric 6:

High

N/A

use.

The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and

Rating of this factor is not applicable to this kind of information.

^{*} Related References: O'Neil, M.J. (ed.). The Merck Index - An Encyclopedia of Chemicals, Drugs, and Biologicals. Cambridge, UK: Royal Society of Chemistry, 2013., p. 1255

Study Citation: OECD Harmonized	NCBI, (2021). PubChem database: compound summary: Octamethylcyclotetrasiloxane. Boiling Point					
Template: HERO ID:	6982832					
			EXTRACTIO	N		
Parameter		Data				
Datition Dated		175.0				
Boiling Point CASRN and Test Material		175 C 556-67-2; Octamethylcyclotetrasiloxane				
Confidentiality, Type, and C	Guideline	none; Experimental; Not reported				
Solvent, Reactivity, Storage		NR; NR; NR				
Radiolabel, Source, State, a		NR; NR; NR				
Standard Deviation Results	•	Not reported				
Results Details		Not reported				
			EVALUATIO	N		
Domain		Metric	Rating	Comments		
Domain 1: Substance						
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.		
Domain 2: Test Reliabil	itv					
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.		
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.		
Domain 3: Other						
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.		
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		
Overall Qualit	ty Determi	nation	High			

^{*} Related References: O'Neil, M.J. (ed.). The Merck Index - An Encyclopedia of Chemicals, Drugs, and Biologicals. Cambridge, UK: Royal Society of Chemistry, 2013., p. 1255

Study Citation: OECD Harmonized	NIST, (2022). N Boiling Point	NIST Chemistry WebBook. Cyclotetrasile	oxane, octamethy	vl- (556-67-2). Standard Reference Database No. 69.
Template:	-			
HERO ID:	10225718			
			EXTRACTIO	N
Parameter		Data		
Boiling Point		446.2 - K		
CASRN and Test Material		556-67-2; D4		
Confidentiality, Type, and	Guideline	No; experimental; Not Reported		
Solvent, Reactivity, Storage	e, and Stability	Not Reported; Not Reported; Not Repor	ted; Not Reported	
Radiolabel, Source, State, a	and Purity	Not Reported; Not Reported; Not Repor	ted; Not Reported	
Standard Deviation Results	S	0.6 K		
Results Details		Not Reported		
			EVALUATIO	N .
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	litv			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: Myers, R.S.; Clever, H.L., Surface Tension of Octamethylcyclotetrasiloxane and Hexamethyldisilazane and Their Solutions with Carbon Tetrachloride and n-Hexadecane, J. Chem. Eng. Data, 1969, 14, 161-164.

HERO ID: 10225718 Table: 2 of 2

Study Citation: OECD Harmonized	NIST, (2022). NIST Chemistry WebBook. Cyclotetrasiloxane, octamethyl- (556-67-2). Standard Reference Database No. 69. Boiling Point							
Template:								
HERO ID:	10225718							
	EXTRACTION							
Parameter		Data						
Boiling Point		448 - 449 K						
CASRN and Test Material		556-67-2; D4						
Confidentiality, Type, and C	Guideline	No; experimental; Not Reported						
Solvent, Reactivity, Storage		Not Reported; Not Reported; Not Report	ted; Not Reported					
Radiolabel, Source, State, a	and Purity	Not Reported; Not Reported; Not Report	_					
Standard Deviation Results		Not Reported						
Results Details		Not Reported						
			EVALUATIO	N				
Domain		Metric	Rating	Comments				
Domain 1: Substance								
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.				
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.				
Domain 2: Test Reliabil	itv							
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.				
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.				
Domain 3: Other								
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.				
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.				
Overall Qualit	Overall Quality Determination							

^{*} Related References: Citing PCR Inc., Research Chemicals Catalog 1990-1991, PCR Inc., Gainesville, FL, 1990, 1.

HERO ID: 6982970 Table: 1 of 2

Study Citation:
OECD Harmonized

O'Neil, M. J. (2013). Octamethylcyclotetrasiloxane. :1255.

Boiling Point

Template:

HEDU ID 6082070

		EXTRACTIO	N
Parameter	Data		
Boiling Point	175 C		
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxano	e	
Confidentiality, Type, and Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Standard Deviation Results	Not reported		
Results Details	STP		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu-

	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination

High

HERO ID: 6982970 Table: 2 of 2

Study Citation:

O'Neil, M. J. (2013). Octamethylcyclotetrasiloxane. :1255.

Study Citation: OECD Harmonized	Boiling Point	2013). Octamethylcyclotetrasiloxane. :1255	•	
Template:	<000000			
HERO ID:	6982970			
			EXTRACTIO	N
Parameter		Data		
Boiling Point		74 C		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	•	NR; NR; NR; NR		
Standard Deviation Results	3	Not reported		
Results Details		20 mm Hg		
]	EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation: OECD Harmonized	RSC, (2020). Ch Boiling Point	emSpider: Octamethylcyclotetrasiloxane		
Template: HERO ID:	6982833			
			EXTRACTIO	N
Parameter		Data		
Boiling Point		176 C		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and C	Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Standard Deviation Results		Not reported		
Results Details		Not reported		
			EVALUATIO	N .
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	y Determin	nation	High	

^{*} Related References: OU Chemical Safety Data (No longer updated)

HERO ID: 6982833 Table: 2 of 6

Study Citation:	
OECD Harmonized	
Template:	

Domain 3: Other

RSC, (2020). ChemSpider: Octamethylcyclotetrasiloxane.

Boiling Point

6982833 **HERO ID:**

EXTR.	AC'	ГIС)N

Parameter	Data		
Boiling Point	175 - 176 C		
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Standard Deviation Results	Not reported		
Results Details	Not reported		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
wiettic 3.	(Method Objectivity)	Mediuili	towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu-
Wichite 4.	remainity// mary treat tyrethou	Wicdiuiii	A mary treat method is unknown out is likely to be appropriate based on the data's litera-

High

N/A

sion in a peer-reviewed/recognized database or other secondary source.

Rating of this factor is not applicable to this kind of information.

Data is from a secondary database with a references to the peer-reviewed original

Overall Quality Determination High

Databases

Models

Metric 5:

Metric 6:

^{*} Related References: Strem Product Catalog: https://www.strem.com/catalog/v/14-5400/

Study Citation: OECD Harmonized	RSC, (2020). C Boiling Point	ChemSpider: Octamethylcyclotetrasiloxane.		
Template:	Bonnig I omi			
HERO ID:	6982833			
		Ī	XTRACTIO	N
Parameter		Data		
Dailing Daint		175 - 176 C		
Boiling Point CASRN and Test Material	1			
		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and		none; Experimental; Not reported		
Solvent, Reactivity, Storag		NR; NR; NR; NR NR; NR; NR; NR		
Radiolabel, Source, State, Standard Deviation Result	•			
Results Details	18	Not reported		
Results Details		Not reported		
		I	EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabi	ility			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	tv Determi	nation	High	

^{*} Related References: Alfa Aesar

Study Citation: OECD Harmonized	RSC, (2020). ChemSpider: Octamethylcyclotetrasiloxane. Boiling Point
Template:	
HERO ID:	6982833

	EXTRACTION		
Parameter	Data		
Boiling Point	175 - 176 C		
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR		
Standard Deviation Results	Not reported		
Results Details	Not reported		

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliab	oility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qual	Overall Quality Determination			

^{*} Related References: Oakwood

HERO ID: 6982833 Table: 5 of 6

Study Citation:	
OFCD Harmoniz	~

RSC, (2020). ChemSpider: Octamethylcyclotetrasiloxane.

OECD Harmonized

Boiling Point

Template: HERO ID:

6982833

EXTRACTION				
Parameter		Data		
Boiling Point		175 - 176 C		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and G	uideline	none; Experimental; Not reported		
Solvent, Reactivity, Storage,	, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, ar	nd Purity	NR; NR; NR; NR		
Standard Deviation Results		Not reported		
Results Details		Not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabilit	tv			
2, 100, 110, 110, 110, 110, 110, 110, 11	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)	1110010111	towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu-
				sion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain 5: Other	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original
	wiedle 3.	Databases	Ingn	source.

N/A

High

Rating of this factor is not applicable to this kind of information.

Metric 6:

Overall Quality Determination

Models

^{*} Related References: LabNetwork

Study Citation: OECD Harmonized	RSC, (2020). Ch Boiling Point	emSpider: Octamethylcyclotetrasiloxano	e.	
Template:	Donnig Fonit			
HERO ID:	6982833			
			EXTRACTIO	N
Parameter		Data		
D. Tr. D. C.		175 1760		
Boiling Point CASRN and Test Material		175 - 176 C		
	N 1 d . 1 l	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and C Solvent, Reactivity, Storage		none; Experimental; Not reported NR: NR: NR: NR		
Radiolabel, Source, State, a	-	NR; NR; NR; NR NR; NR; NR		
Standard Deviation Results	iiu Furity	Not reported		
Results Details		Not reported		
Results Details		Not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabili	tv			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain J. Onlei	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determination I			High	

^{*} Related References: Sigma-Aldrich

Stu	ly Citation:	
OE	CD Harmonized	
CEC.	• .	

1 000

SEHSC, (2020). Request for risk evaluation under the Toxic Substances Control Act; Octamethylcyclotetrasiloxane (D4; CASRN: 556-67-2).

Boiling Point

Template: HERO ID:

7296376

EXTRACTION			
Parameter	Data		
Boiling Point	175.5 - 175.6 C		
CASRN and Test Material	556-67-2; Not Reported		
Confidentiality, Type, and Guideline	Not Reported; Not Reported; Not Reported		
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Reported; Not Reported		
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Reported; Not Reported		
Standard Deviation Results	Not Reported		
Results Details	Not Reported		

			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance	•			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Relia	bility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination

Medium

^{*} Related References: Source cited: HERO ID: 7002467 (pending retrieval) - IUCLID. 2005. IUCLID Dataset for Octamethylcyclotetrasiloxane. Willington, CT: Epona Associates LLC.Source cited not in HERO - IUCLID. 2000. IUCLID Dataset for Octamethylcyclotetrasiloxane. Year 2000 CD-ROM Edition. Ispra: European Chemicals Bureau, European Commission. Source cited: HERO ID: 7289280 (duplicates: HERO ID: 7289281, HERO ID: 7330442) - EA09A Brooke D.N., Crookes M.J., Gray D., Robertson S. 2009. Environmental Risk Assessment Report: Octamethylcyclotetrasiloxane. UK Environmental Agency. Source cited: HERO ID: 6990635 (pending retrieval) - CSR18A Chemical Safety Report (CSR). 2018. Chemical safety report – octamethylcyclotetrasiloxane, D4. (CSR18A). Accessed December 2019. Available at: https://echa.europa.eu/substanceinformation/-/ substanceinfo/100.008.307. Not in HERO - Chandra 1997 Chandra, G. 1997. Organosilicon Materials. The Handbook of Environmental Chemistry, Volume 3 Anthropogenic Compounds, Part H. Berlin: Springer-Verlag, HERO ID: 10229968 - Merck. 1996. The MERCK Index. An Encyclopedia of Chemicals, Drugs, and Biologicals, 12th Edn. Whitehouse Station, NJ. MERCK and CO. Inc. HERO ID: 7002242 (pending retrieval) - OECD. 1995. Draft SIDS Dossier on Octamethylcyclotetrasiloxane. 20 June 1995. Paris: OECD.

Study Citation: OECD Harmonized	U.S. EPA, (2020 Boiling Point)). Chemistry dashboard information for C	octamethylcyclo	otetrasiloxane.
Template:				
HERO ID:	6982826			
			EXTRACTIO	N
Parameter		Data		
Boiling Point		176 C		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Standard Deviation Results	S	Not reported		
Results Details		176 deg C average of 4 values		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

^{*} Related References: Data range determined from multiple primary sources in ChemDashBoard.

Density CASRN and Test Material Confidentiality, Type, and Guideline Solvent, Reactivity, Storage, and Stabilit Radiolabel, Source, State, and Purity Density Type System Temperature Standard Deviation Results Results Details Domain Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 4:					
CASRN and Test Material Confidentiality, Type, and Guideline Solvent, Reactivity, Storage, and Stabilic Radiolabel, Source, State, and Purity Density Type System Temperature Standard Deviation Results Results Details Domain Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 4: Domain 3: Other	3981013				
Density CASRN and Test Material Confidentiality, Type, and Guideline Solvent, Reactivity, Storage, and Stabilit Radiolabel, Source, State, and Purity Density Type System Temperature Standard Deviation Results Results Details Domain Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 4: Domain 3: Other		EXTRACTIO	N		
Confidentiality, Type, and Guideline Solvent, Reactivity, Storage, and Stabili Radiolabel, Source, State, and Purity Density Type System Temperature Standard Deviation Results Results Details Domain Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 4: Domain 3: Other	Data				
System Temperature Standard Deviation Results Results Details Domain Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 3: Metric 4: Domain 3: Other	0.9558 -				
Solvent, Reactivity, Storage, and Stabilic Radiolabel, Source, State, and Purity Density Type System Temperature Standard Deviation Results Results Details Domain Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 4: Domain 3: Other	556-67-2; Octamethylcyclotetrasiloxane	;			
Radiolabel, Source, State, and Purity Density Type System Temperature Standard Deviation Results Results Details Domain Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 4: Domain 3: Other	none; not specified; not specified				
Density Type System Temperature Standard Deviation Results Results Details Domain Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 4: Domain 3: Other	y NR; NR; NR; NR				
Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 3: Metric 4: Domain 3: Other	NR; NR; NR; NR Notes: NR				
Temperature Standard Deviation Results Results Details Domain Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 3: Metric 4: Domain 3: Other	specific gravity (density of a substance of	divided by the densi	ty of water)		
Standard Deviation Results Results Details Domain Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 3: Metric 4: Domain 3: Other	not specified				
Domain Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 3: Metric 4: Domain 3: Other	25°C				
Domain Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 3: Metric 4: Domain 3: Other	not reported				
Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 3: Metric 4: Domain 3: Other	not reported				
Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 3: Metric 4: Domain 3: Other		EVALUATIO	N		
Metric 1: Metric 2: Domain 2: Test Reliability Metric 3: Metric 4: Domain 3: Other	Metric	Rating	Comments		
Metric 2: Domain 2: Test Reliability Metric 3: Metric 4: Domain 3: Other					
Domain 2: Test Reliability Metric 3: Metric 4: Domain 3: Other	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
Metric 3: Metric 4: Domain 3: Other	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.		
Metric 4: Domain 3: Other					
Domain 3: Other	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.		
	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.		
Wette 3.	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review; specific source not reported.		
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		
Overall Quality Dete	rmination	High			

^{*} Related References: primary reference not specified but include CRC (2009), HSDB (no date), Merck (2006), SAX (2012)

Study Citation: OECD Harmonized Template:	NIST, (2022). NIST Chemistry WebBook. Cyclotetrasiloxane, octamethyl- (556-67-2). Standard Reference Database No. 69. Density				
HERO ID:	10225718				
			EXTRACTIO	N	
Parameter		Data			
Density		0.995 - mol/l			
CASRN and Test Material		556-67-2; D4			
Confidentiality, Type, and	Guideline	no; experimental; Not Reported			
Solvent, Reactivity, Storag		Not Reported; Not Reported; Not Report	ted; Not Reported		
Radiolabel, Source, State,	and Purity	Not Reported; Not Reported; Not Report	ted; Not Reported		
Density Type		density			
System		Not Reported			
Temperature		Not Reported			
Standard Deviation Result	S	0.00991 mol/l			
Results Details		Reported as critical density			
			EVALUATIO	N N	
Domain		Metric	Rating	Comments	
Domain 1: Substance					
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.	
Domain 2: Test Reliabi	lity				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.	
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.	
Domain 3: Other					
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Quali	ty Determi	nation	High		

^{*} Related References: Cited from McLure, I.A.; Neville, J.F., The critical temperatures and pressures of hexamethyldisilmethylene, octamethylcyclotetrasiloxane, and decamethylcyclpentasiloxane, J. Chem. Thermodyn., 1982, 14, 385-8.

Study Citation: OECD Harmonized Template:	Elsevier, (2019) Density). Reaxys: physical-chemical property data	for octamethyl	cyclotetrasiloxane. CAS Registry Number: 556-67-2
HERO ID:	6984075			
]	EXTRACTIO	N
Parameter		Data		
Density		0.9497 - 0.9568 g/cm3		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and C	Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Temperature		Not Reported		
Standard Deviation Results		Not reported		
Results Details		47 values were reported in Reaxys; 21 values measured at unreported or non-standard term.		d in the range of 0.9497 to 0.9568 at 19.99-25°C; 26 values were outside this range or
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Data range determined from multiple primary sources in REAXYS.

Study Citation: OECD Harmonized	Density	j. Keanys, physical-enginear property data	101 1,1,3,3,3,3	7,7-octamethyltetrasiloxane-1,7-diol. CAS Registry Number: 3081-07-0.
Template:				
HERO ID:	7991715			
			EXTRACTIO	N
Parameter		Data		
Density		0.9881 - 0.9886 g/cm3		
CASRN and Test Material		3081-07-0; Octamethyltetrasiloxanediol		
Confidentiality, Type, and C	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State, a	nd Purity	NR; NR; NR; NR		
Геmperature		Not Reported		
Standard Deviation Results		Not reported		
Results Details		2 values reported in Reaxys; reference tem	nperature 4°C, me	easurement temperature 20°C
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabili	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	v Dotowsi	nation	High	

^{*} Related References: Andrianov,K.A. et al.; Bulletin of the Academy of Sciences of the USSR Division of Chemical Science; (1962); p.2144 - 2146; Sokolow; Zhurnal Obshchei Khimii; vol. 29; (1959); p. 258,261, 263; engl. Ausg. S. 262, 265, 266

Study Citation: OECD Harmonized Template:	Elsevier, (2021). Reaxys: physical-chemical property data for 1,1,3,3,5,5-hexamethyltrisiloxane-1,5-diol. CAS Registry Number: 3663-50-1. Density					
HERO ID:	7992314					
			EXTRACTIO	N		
Parameter		Data				
Density		0.991 - 1.0127 g/cm3				
CASRN and Test Material		3663-50-1; Hexamethyltrisiloxanediol				
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported				
Solvent, Reactivity, Storage		NR; NR; NR				
Radiolabel, Source, State,	-	NR; NR; NR; NR				
Temperature	•	Not Reported				
Standard Deviation Results	S	Not reported				
Results Details		5 values were reported in Reaxys in the ra	ange of 0.991 - 1.0	0127 g/cm3, at 20-25°C (reference temperature 4°C)		
			EVALUATIO	N		
Domain		Metric	Rating	Comments		
Domain 1: Substance			8			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.		
Domain 2: Test Reliabil	itv					
2 0.1. 4 .1.0.1.0.1.0.1.0.1.0.1.0.1.0.1.0.1.0.1.	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.		
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.		
Domain 3: Other						
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.		
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		
Overall Quality	ty Determi	nation	High			

^{*} Related References: Voronkov et al. 1970; Kaufman and Karlin 1970; Union Carbide Patent 1965; Andrianov et al. 1962; Sokolow 1959.

Study Citation: OECD Harmonized Template:	Elsevier, (2021) Density). Reaxys: physical-chemical property da	ta for tetramethy	l-1,3-disiloxanediol. CAS Registry Number: 1118-15-6.
HERO ID:	7994661			
			EXTRACTIO	N
Parameter		Data		
Density		1.08 - 1.15 g/cm3		
CASRN and Test Material		1118-15-6; Tetramethyldisiloxanediol		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Temperature		Not Reported		
Standard Deviation Results	3	Not reported		
Results Details		4 values reported in reaxys; 2 values were	re 1.118 g/cm3 at 1	6°C; 2 values did not have measurement temperatures. Crystallographic density.
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: Lickiss et al. 1993; Hyde 1953; Kakudo et al. 1953; Kakudo et al 1953.

Study Citation: OECD Harmonized Template:	Elsevier, (2021) Density). Reaxys: physical-chemical property da	ta for dimethylsi	lanediol. CAS Registry Number: 1066-42-8.
HERO ID:	7995011			
			EXTRACTIO	N
Parameter		Data		
Density		1.095 - 1.099 g/cm3		
CASRN and Test Material		1066-42-8; Dimethylsilanediol		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storag	ge, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Temperature		Not Reported		
Standard Deviation Result	S	Not reported		
Results Details		1 value was reported in Reaxys		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Hyde; Journal of the American Chemical Society; vol. 75; (1953); p. 2166

Study Citation: OECD Harmonized Template:	Haynes, W. M. Density	(2014). 1,1,3,3-Tetramethyl-1,3-disiloxar	nediol. :3-506.	
HERO ID:	7998725			
			EXTRACTIO	N
Parameter		Data		
Density		1.095 g/cm3		
CASRN and Test Material		1118-15-6; Tetramethyldisiloxanediol		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Temperature		25°C		
Standard Deviation Results	3	Not reported		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality	tv Determi	nation	High	

Study Citation: OECD Harmonized	•	(2014). Octamethylcyclotetrasiloxane. :3-	-424.	
Template:	Density			
HERO ID:	6982969			
			EXTRACTIO	N
Parameter		Data		
Density		0.9561 g/cm3		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and Guideline		none; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability		NR; NR; NR; NR		
Radiolabel, Source, State, and Purity		NR; NR; NR; NR		
Temperature		Not Reported		
Standard Deviation Results	3	Not reported		
Results Details		20°C		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determination			High	

Study Citation: OECD Harmonized	NCBI, (2021). PubChem database: compound summary: Octamethylcyclotetrasiloxane. Density					
Template: HERO ID:	6982832					
			EXTRACTIO	N		
Parameter		Data				
Density		0.96				
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane				
Confidentiality, Type, and Guideline		none; Experimental; Not reported				
Solvent, Reactivity, Storage, and Stability		NR; NR; NR				
Radiolabel, Source, State, and Purity		NR; NR; NR; NR				
Геmperature		Not Reported				
Standard Deviation Results	1	Not reported				
Results Details		relative density: water = 1				
			EVALUATIO	N		
Domain		Metric	Rating	Comments		
Domain 1: Substance						
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.		
Domain 2: Test Reliabil	ity					
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.		
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.		
Domain 3: Other						
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.		
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		
Overall Quality Determination			High			

^{*} Related References: ILO International Chemical Safety Cards (ICSC)

Overall Quality Determination

Study Citation: OECD Harmonized	NCBI, (2021). Density	PubChem database: compound summary: (Octamethylcycl	otetrasiloxane.
Template: HERO ID:	6982832			
			EXTRACTIO	N
Parameter		Data		
Density		0.9558 units not given		
CASRN and Test Material	1	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storag		NR; NR; NR		
Radiolabel, Source, State,	•	NR; NR; NR; NR		
Temperature	•	Not Reported		
Standard Deviation Result	s	Not reported		
Results Details		Not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Units not reported but expected to be g/cm3 based on primary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

High

^{*} Related References: O'Neil, M.J. (ed.). The Merck Index - An Encyclopedia of Chemicals, Drugs, and Biologicals. Cambridge, UK: Royal Society of Chemistry, 2013., p. 1255

Study Citation: OECD Harmonized	O'Neil, M. J. (2 Density	013). Octamethylcyclotetrasiloxane. :125	5.	
Template:	Demoney			
HERO ID:	6982970			
			EXTRACTIO	N
Parameter		Data		
Density		0.9558		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and C	Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State, a		NR; NR; NR; NR		
Temperature		Not Reported		
Standard Deviation Results		Not reported		
Results Details		units not given		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance			-	
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

Study Citation:	Palczewska-Tulinska, M., Oracz, P. (2005). Selected physicochemical properties of hexamethylcyclotrisiloxane, octamethylcyclotetrasiloxane, and de-
	camethylcyclopentasiloxane. Journal of Chemical and Engineering Data 50(5):1711-1719.

OECD Harmonized Template:

Density

EXTR	ACTION

Parameter	Data
Density	0.95755 g/cm3
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane
Confidentiality, Type, and Guideline	none; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	no; 99% dried over sieves, rectified, refluxed then collected at a ratio of 1:30.; Liquid; 99.98%
Temperature	292.00 K
Standard Deviation Results	$\pm 0.14 \sigma$ (p/kg-m3)
Results Details	reported as 957.55 kg/m3 at 292.00 K; 957.55-790.24 kg/m3 at 292.00 to 433.15 K

EVALUATION					
Domain		Metric	Rating	Comments	
Domain 1: Substance					
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.	
Domain 2: Test Reliab	ility				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.	
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.	
Domain 3: Other					
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	

Study Citation: OECD Harmonized	RSC, (2020). C Density	hemSpider: Octamethylcyclotetrasiloxane		
Template: HERO ID:	6982833			
			EXTRACTIO	N
Parameter		Data		
Density		0.956 g/cm3		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Temperature		Not Reported		
Standard Deviation Results	S	Not reported		
Results Details		reported as 0.956 g/mL		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	tv Determi	nation	High	

^{*} Related References: Alfa Aesar

Study Citation:	RSC, (2020). ChemSpider: Octamethylcyclotetrasiloxane.
OECD Harmonized	Density
Template:	
HERO ID:	6982833

		EXTRACTION
Parameter	Data	
Density	0.956 g/cm3	
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane	
Confidentiality, Type, and Guideline	none; Experimental; Not reported	
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR	
Radiolabel, Source, State, and Purity	NR; NR; NR; NR	
Temperature	Not Reported	
Standard Deviation Results	Not reported	
Results Details	reported as 0.956 g/mL	

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	2			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Relia	ability			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qua	lity Determ	ination	High	

^{*} Related References: Oakwood

Study Citation:	RSC, (2020). (
OECD Harmonized	Density

RSC, (2020). ChemSpider: Octamethylcyclotetrasiloxane.

Template:

HERO ID: 6982833

EXTRACTION

Parameter	Data		
Density	0.956 g/cm3		
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Temperature	Not Reported		
Standard Deviation Results	Not reported		
Results Details	reported as 0.956 g/mL		

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	e			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Relia	ability			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qua	lity Determ	ination	High	

* Related References: Sigma-Aldrich

Study Citation:	
OECD Harmonized	

RSC, (2020). ChemSpider: Octamethylcyclotetrasiloxane.

Template:

Density

HERO ID:

6982833

EXT	'RA	CT	TO	N

Parameter	Data
Density	0.956 g/cm3
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane
Confidentiality, Type, and Guideline	none; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Temperature	Not Reported
Standard Deviation Results	Not reported
Results Details	reported as 0.956 g/mL

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	e			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Relia	ability			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Oua			High	Comment of the commen

^{*} Related References: Fluorochem

Study Citation: OECD Harmonized	RSC, (2021). O Density	ChemSpider: Dimethylsilanediol.		
Template: HERO ID:	7999339			
			EXTRACTION	
Parameter		Data		
Density		0.97 g/mL		
CASRN and Test Material		1066-42-8; Dimethylsilanediol		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Temperature		Not Reported		
Standard Deviation Result	S	Not reported		
Results Details		Not reported		
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	tv Determi	mation	Medium	
Overall Quali	ty Determin	mation	Mcdium	

^{*} Related References: Alfa Aesar

Zhang, Y., Dong, H., Wu, C., Yu, L., Xu, J. (2015). The mixing properties of 1,3,5-trimethyl-1,3,5-tris(3,3,3-trifluoropropyl) cyclotrisiloxane with various

Study Citation:

Domain 2: Test Reliability

Domain 3: Other

Metric 3:

Metric 4:

Metric 5:

Metric 6:

Overall Quality Determination

Reliability/Unbiased

(Method Objectivity)

Databases

Models

Reliability/Analytical Method

OECD Harmonized	organosilicon on Density	compounds at different temperatures.	Journal of Chemical	Thermodynamics 81:16-25.			
Template: HERO ID:	4279677						
			EXTRACTIO	ON .			
Parameter		Data					
Density		0.95603 g/cm3					
CASRN and Test Material		556-67-2; Octamethylcyclotetrasil	oxane				
Confidentiality, Type, and	Guideline	none; Experimental; Not reported					
Solvent, Reactivity, Storag	ge, and Stability	NR; NR; NR					
Radiolabel, Source, State,	and Purity	no; Dow Corning; Liquid; 0.995 mass fraction Notes: measured by Gas and Liquid Chromatography.					
Temperature		293.15 K					
Standard Deviation Result	s	Not reported					
Results Details		Reported as 0.95603 g/cm3 measured at 293.15 K and atmospheric pressure, 102.355 ± 0.020 kPa					
			EVALUATIO	ON .			
Domain		Metric	Rating	Comments			
Domain 1: Substance							
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.			
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.			

High

High

N/A

N/A

High

The methodology for producing the information is designed to answer a specific ques-

Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.

tion, and the methodology's objective is clear.

Rating of this factor is not applicable to this kind of information.

Rating of this factor is not applicable to this kind of information.

Domain 3: Other

HERO ID: 9960764 Table: 1 of 1

OECD Harmonized Template: HERO ID:	Vapor Pressure 9960764							
			EXTRACTION					
Parameter		Data						
Vapor Pressure		1.05 - mm Hg						
CASRN and Test Material		556-67-2; D4						
Confidentiality, Type, and	Guideline	No; Not specified; Not reported						
Solvent, Reactivity, Storage		Not reported; Not reported; Not reported						
Radiolabel, Source, State,	and Purity	Not reported; Not reported; Not reported Notes: Not reported						
Temperature	•	Not reported						
System		Not reported	•					
Standard Deviation Results	S	Not reported						
Results Details		Not Reported						
			EVALUATION					
Domain		Metric	Rating	Comments				
Domain 1: Substance								
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.				
	Metric 2:	Appropriateness	High	The data reported is consistent with the chemicals physical and chemical properties.				
Domain 2: Test Reliabil	itv							
_ :: 10 00 110114 011	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased				

Low

Medium

N/A

used.

original sources.

towards a particular product or outcome.

This metric does not apply to this study type.

The analytical method is unknown and there is no indication that a reliable method was

The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to

Overall Quality Determination Medium

Models

Databases

Metric 4:

Metric 5:

Metric 6:

(Method Objectivity)

Reliability/Analytical Method

Study Citation: OECD Harmonized	Harmonized Vapor Pressure						
Template: HERO ID:	9644522						
			EXTRACTION				
Parameter		Data					
Vapor Pressure		>/= 18.1 - Pa					
CASRN and Test Material		1066-42-8; dimethylsilanediol					
Confidentiality, Type, and	Guideline	No; Estimated; Not reported					
Solvent, Reactivity, Storage	e, and Stability	Not reported; Not reported; Not reported;	Not reported				
Radiolabel, Source, State, a	and Purity	Not reported; Not reported; Not reported;	Not reported Notes: No	ot reported			
Temperature		25 deg C					
System		Not reported					
Standard Deviation Results	3	Not reported	Not reported				
Results Details		citing U.S. Environmental Protection Age	ency, 2010. Boiling Pt, N	Melting Pt, Vapor Pressure Estimations (MPBPWIN v1.42), s.l.: s.n.			
			EVALUATION				
Domain		Metric	Rating	Comments			
Domain 1: Substance							
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.			
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.			
Domain 2: Test Reliabil	ity						
	Metric 3:	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information.			
	Metric 4:	(Method Objectivity) Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.			
Domain 3: Other							
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.			
	Metric 6:	Models	Low	The model endpoint is outdated and the data are not useful or reproducible.			
Overall Qualit	ty Determi	nation	Medium				

^{*} Related References: Citing U.S. Environmental Protection Agency, 2010. Boiling Pt, Melting Pt, Vapor Pressure Estimations (MPBPWIN v1.42), s.l.: s.n. (No HERO ID)

HERO ID: 6989156 Table: 1 of 1

Study Citation:
OECD Harmonized

Flaningam, O. L. (1986). Vapor pressures of poly(dimethylsiloxane) oligomers. Journal of Chemical and Engineering Data 31(3):266-272.

Vapor Pressure

HERO ID: 6989156		EXTER A CONTACT				
Parameter	Data	EXTRACTION				
Parameter	Data					
Vapor Pressure	>= 5.36 - < 133.26 kPa					
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane					
Confidentiality, Type, and Guideline	None; Experimental; non-guideline					
Solvent, Reactivity, Storage, and Stability	NR; NR; NR					
Radiolabel, Source, State, and Purity		clics through a high-e	ficiency distillation column; NR; Not specified Notes: D4			
Temperature	361.71-459.65 K		, , , , , , , , , , , , , , , , , , ,			
System	Vapor pressures measured in an ebulliome	ter over the pressure ra	inge of 7-133 kPa; experimental data fit for Antoine equation and constants A, B,			
•	and C	•				
Standard Deviation Results	1	temperature measurement readings to the nearest 0.01K				
Results Details	T(K); measured VP (kPa); calculated VP (kPa):361.71; 5.36; 5.35 366.76; 6.69; 6.69; 376.41; 10.02; 10.02 383.69; 13.35; 13.35 394.63; 20.00; 19.99 402.94; 26.65; 26.66 424.99; 53.25; 53.26432.78; 66.65; 66.55439.46; 79.92; 79.91448.53; 101.29; 101.31455.29; 119.96; 119.95459.65; 133.26; 133.31415.46; 39.94; 39.9					
		EVALUATION				
Domain	Metric	Rating	Comments			
Domain 1: Substance						
Metric 1:	Representativeness	High	Data are measured for the subject chemical substance.			
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.			
Domain 2: Test Reliability						
Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased			
moule 3.	(Method Objectivity)	Modfalli	towards a particular product or outcome.			
Metric 4:	Reliability/Analytical Method	Low	Data are obtained by accepted standard analytical methods.			
Domain 3: Other						
Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.			
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.			
	• 4•	3.7.11				
Overall Quality Detern	nnation	Medium				

Study Citation:	Kochetkov, A., Smith, J. S., Ravikrishna, R., Valsaraj, K. T., Thibodeaux, L. J. (2001). Air-water partition constants for volatile methyl siloxand Environmental Toxicology and Chemistry 20(10):2184-2188.				
OECD Harmonized Template:	Vapor Pressure		100.		
HERO ID:	7303416				
			EXTRACTIO	N	
Parameter		Data			
Vapor Pressure		0.121 - kPa			
CASRN and Test Material		Not Reported; Octamethylcyclotetrasilox	ane		
Confidentiality, Type, and	Guideline	None; Extrapolated; NR			
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR			
Radiolabel, Source, State,	and Purity	NR; NR; NR Notes: NR			
Temperature		299-301K			
System		NR			
Standard Deviation Results	S	NR			
Results Details		Not Reported			
			EVALUATIO	N	
Domain		Metric	Rating	Comments	
Domain 1: Substance					
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.	
Domain 2: Test Reliabil	lity				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.	
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other (peer-reviewed) secondary source.	
Domain 3: Other					
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Quali	tv Determi	nation	High		

^{*} Related References: Citing HERO ID 6990705 or correlated using American Institute of Chemical EngineersDIPPR equation HERO ID: 6989156

HERO ID: 2629388 Table: 1 of 1

Study Citation:	Lei, Y. D., Wania, F., Mathers, D., an (2010).	Temperature-Dependent Vapor Pressure of	of Selected Cyclic and Linear Polydimethylsiloxane Oligomers.

Journal of Chemical and Engineering Data 55(12):5868-5873.

OECD Harmonized

Vapor Pressure

Template:

EXTR	ACTION

Parameter	Data
Vapor Pressure	92.8 - 124.5 Pa
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	HPLC grade hexane; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; Dow Corning Corporation (Midland, MI); Liquid; NR
Temperature	298.15 K
System	Gas chromatographic retention time (GCRT) technique P(GC) and Liquid state vapor pressure P(L)
Standard Deviation Results	$P(L) \pm 6.2 \text{ Pa}; P(GC) \pm 0.9$
Results Details	$P(GC) = 92.8 \pm 0.9 \text{ Pa}$; $P(L) 124.5 \pm 6.2 \text{ Pa}$ at 298.15 K. Temperature ranges of retention time measurements 308.15-368.15 K.

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabi	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation: OECD Harmonized	NCBI, (2021). I Vapor Pressure	PubChem database: compound summary: 0	Octamethylcycl	otetrasiloxane.
Template: HERO ID:	6982832			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		1.05 torr		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and C	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Temperature		25°C		
System		Not reported		
Standard Deviation Results		Not reported		
Results Details		reported as 1.05 mm Hg		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use or includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	Ty Dotomi		High	

^{*} Related References: EPA DSSTox; Hazardous Substances Data Bank (HSDB)

Study Citation: OECD Harmonized Template:	NCBI, (2021). I Vapor Pressure	PubChem database: compound summary:	Octamethylcycl	otetrasiloxane.
HERO ID:	6982832			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		133.3 Pa		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Temperature		21.7°C		
System		Not reported		
Standard Deviation Results	S	Not reported		
Results Details		Not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: ILO International Chemical Safety Cards (ICSC)

Study Citation: OECD Harmonized	NIST, (2022). N Vapor Pressure	IST Chemistry WebBook. Cyclotetrasilo	oxane, octamethy	l- (556-67-2). Standard Reference Database No. 69.
Template:	•			
HERO ID:	10225718			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		56.1 - kJ/mol		
CASRN and Test Material		556-67-2; D4		
Confidentiality, Type, and C	Guideline	No; experimental; Not Reported		
Solvent, Reactivity, Storage	e, and Stability	Not Reported; Not Reported; Not Report	ted; Not Reported	
Radiolabel, Source, State, a		Not Reported; Not Reported; Not Report	_	
Temperature		303-428 K		
System		Not Reported		
Standard Deviation Results	1	Not Reported		
Results Details		Isoteniscopealso noted under enthalpy of	f vaporization as 48	.5 kJ/mol at 373 K and 45.6 kJ/mol at 398 K.
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is non-standard but is expected to be appropriate OR the analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: Cited from Osthoff, Robert C.; Grubb, W.T., Physical Properties of Organosilicon Compounds. III. Thermodynamic Properties of Octamethylcyclotetrasiloxane, J. Am. Chem. Soc., 1954, 76, 2, 399-401, https://doi.org/10.1021/ja01631a025.

Metric 6:

Overall Quality Determination

Models

Study Citation: OECD Harmonized Template:	NIST, (2022). I Vapor Pressure	•	oxane, octamethy	'l- (556-67-2). Standard Reference Database No. 69.
HERO ID:	10225718			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		47.6 - kJ/mol		
CASRN and Test Material		556-67-2; D4		
Confidentiality, Type, and	Guideline	No; experimental; Not Reported		
Solvent, Reactivity, Storag	ge, and Stability	Not Reported; Not Reported; Not Repor	ted; Not Reported	
Radiolabel, Source, State,	and Purity	Not Reported; Not Reported; Not Repor	ted; Not Reported	
Temperature		376 K		
System		Not Reported		
Standard Deviation Result	S	Not Reported		
Results Details		Ebulliometer; based on data from 361-40	69 K.	
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is non-standard but is expected to be appropriate OR the analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and

N/A

High

use OR includes references to the original sources.

Rating of this factor is not applicable to this kind of information.

^{*} Related References: Cited from Flaningam, Ora L., Vapor pressures of poly(dimethylsiloxane) oligomers, J. Chem. Eng. Data, 1986, 31, 3, 266-272, https://doi.org/10.1021/je00045a002.

HERO ID: 10225718 Table: 3 of 4

Study Citation: OECD Harmonized	NIST, (2022). N Vapor Pressure	•	oxane, octamethy	vl- (556-67-2). Standard Reference Database No. 69.
Template: HERO ID:	10225718			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		57.0 - kJ/mol		
CASRN and Test Material		556-67-2; D4		
Confidentiality, Type, and		No; experimental; Not Reported		
Solvent, Reactivity, Storag		Not Reported; Not Reported; Not Report	ted: Not Reported	
Radiolabel, Source, State,	· · · · · ·	Not Reported; Not Reported; Not Report	_	
Temperature	and runty	Not Reported	ica, moi reponed	
System		Not Reported		
Standard Deviation Result	S	0.8 kJ/mol		
Results Details	~	Calorimetry		
			EVALUATIO	Ni
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features
				(e.g., presence of certain functional groups) or other physical/chemical properties (e.g., if the physical state is described as a liquid, the substance should have a melting point below 25°C and a boiling point above 25°C) or behaviors.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is non-standard but is expected to be appropriate OR the analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain 3. One	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	tv Determi	nation	High	

^{*} Related References: Cited from Voronkov, M.G.; Klyuchnikov, V.A.; Mironenko, E.V.; Shvets, G.N.; Danilova, T.F.; Khudobin, Yu.I., Thermochemistry of organosilicon compounds, Journal of Organometallic Chemistry, 1991, 406, 1-2, 91-97, https://doi.org/10.1016/0022-328X(91)83174-3 .

NIST, (2022). NIST Chemistry WebBook. Cyclotetrasiloxane, octamethyl- (556-67-2). Standard Reference Database No. 69.

Study Citation:

Domain 3: Other

Metric 5:

Metric 6:

Overall Quality Determination

•	por Pressure	is remaining wesbook. Cyclotetrusing	oxune, octametry	1 (330 07 2), Standard Reference Battabase 110. 07.
Template:	•			
HERO ID: 102	225718			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		44.1 - kJ/mol		
CASRN and Test Material		556-67-2; D4		
Confidentiality, Type, and Guidel	line	No; experimental; Not Reported		
Solvent, Reactivity, Storage, and	Stability	Not Reported; Not Reported; Not Report	ted; Not Reported	
Radiolabel, Source, State, and Pu	ırity	Not Reported; Not Reported; Not Report	ted; Not Reported	
Temperature		378 K		
System		Not Reported		
Standard Deviation Results		Not Reported		
Results Details		Based on data from 334-423 K		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
Me	etric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Me	etric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties (e.g., if the physical state is described as a liquid, the substance should have a melting point below 25°C and a boiling point above 25°C) or behaviors.
Domain 2: Test Reliability				
-	etric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Me	etric 4:	Reliability/Analytical Method	Medium	The analytical method is non-standard but is expected to be appropriate OR the analytical method is unknown but is likely to be appropriate based on the data's inclusion in a

* Related References: Cited from Ditsent, V.E.; Skorokhodov, I.I.; Terent'eva, N.A.; Zolotareva, M.N., Russ. J. Phys. Chem., 1971, 45, 6, 901.

Databases

Models

High

N/A

High

peer-reviewed/recognized database or other secondary source.

Rating of this factor is not applicable to this kind of information.

use OR includes references to the original sources.

The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and

Study Citation:
OECD Harmonized

SEHSC, (2020). Request for risk evaluation under the Toxic Substances Control Act; Octamethylcyclotetrasiloxane (D4; CASRN: 556-67-2).

Vapor Pressure

Template: HERO ID:

7296376

EXTRACTION

Parameter	Data
Vapor Pressure	132 - Pa
CASRN and Test Material	556-67-2; Not Reported
Confidentiality, Type, and Guideline	Not Reported; Not Reported; Not Reported
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Reported; Not Reported
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Reported; Not Reported
Temperature	25C
System	Not Reported
Standard Deviation Results	Not Reported
Results Details	Additional values from multiple sources noted: 82–96 Pa at 20°C or 132–139 Pa at 25°C

			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliab	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination

Medium

^{*} Related References: Source cited: Not in HERO - Chandra 1997 Chandra, G. 1997. Organosilicon Materials. The Handbook of Environmental Chemistry, Volume 3 Anthropogenic Compounds, Part H. Berlin: Springer-Verlag. Source cited: HERO ID: 7289280 (duplicates: HERO ID: 7289281, HERO ID: 7330442) - EA09A Brooke D.N., Crookes M.J., Gray D., Robertson S. 2009. Environmental Risk Assessment Report: Octamethylcyclotetrasiloxane. UK Environmental Agency. Source cited: HERO ID: 7002467 (pending retrieval) - IUCLID. 2005. IUCLID Dataset for Octamethylcyclotetrasiloxane. Willington, CT: Epona Associates LLC.Source cited: HERO ID: 6990635 (pending retrieval) - CSR18A Chemical Safety Report (CSR). 2018. Chemical safety report – octamethylcyclotetrasiloxane, D4. (CSR18A). Accessed December 2019. Available at: https://echa.europa.eu/substanceinformation/-/ substanceinfo/100.008.307.

Study Citation: OECD Harmonized	U.S. EPA, (2020 Vapor Pressure	0). Chemistry dashboard information for Oc	etamethylcyclo	otetrasiloxane.
Template: HERO ID:	6982826			
		I	EXTRACTIO	N
Parameter		Data		
Vapor Pressure		1.05 torr		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State,	-	NR; NR; NR; NR		
Temperature	·	Not reported		
System		Not reported		
Standard Deviation Results	3	Not reported		
Results Details		reported as 1.05 mm Hg		
]	EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
2 omani o. omei	Metric 5:	Databases	High	Data is from a recognized, peer- reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: PhysProp

Study Citation: OECD Harmonized Template:	Compton, K. L logKow	(2019). Dietary biotransformation and b	ioaccumulation of cyc	elic siloxanes in rainbow trout (Oncorhynchus mykiss).			
HERO ID:	9960764						
			EXTRACTION				
Parameter		Data					
log k _{ow}		6.49 -					
CASRN and Test Material		556-67-2; D4					
Confidentiality, Type, and		No; Not specified; Not reported					
Solvent, Reactivity, Storag		Not reported; Not reported; Not reported	; Not reported				
Radiolabel, Source, State,	-	Not reported; Not reported; Not reported	-	ot reported			
Temperature	·	Not reported		•			
System		Not reported					
pН		Not reported					
Results Details Method		Not reported					
Standard Deviation Results	s	Not reported					
Results Details		Not Reported					
			EVALUATION				
Domain		Metric	Rating	Comments			
Domain 1: Substance							
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.			
	Metric 2:	Appropriateness	High	The data reported is consistent with the chemicals physical and chemical properties.			
Domain 2: Test Reliabil	lity						
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.			
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.			
Domain 3: Other							
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.			
	Metric 6:	Models	N/A	This metric does not apply to this study type.			
Overall Quali	ty Determi	ination	Medium				

^{*} Related References: Citing [EC and HC 2008b]. Environment Canada and Health Canada. November 2008. Screening assessment for the challenge: octamethylcyclotetrasiloxane (D4), chemical abstracts service registry number 556-67-2. November 2008. (HERO ID 6993847)

Study Citation:	Corning,, Dow (1987). The n-octanol/water partition coefficient of octamethylcyclotetrasiloxane with attachment and cover letter dated 092987.
OECD Harmonized	logKow

Template:

EXTRACTION				
Parameter	Data			
$\log k_{ow}$	5.10			
CASRN and Test Material	556-67-2; D4			
Confidentiality, Type, and Guideline	None; Experimental; Not Reported			
Solvent, Reactivity, Storage, and Stability	NR; NR; NR			
Radiolabel, Source, State, and Purity	NR; NR; >99.5%			
Temperature	Not reported			
System	100 uL (0.0956 g) D4 in 25 g (30.23 mL) octanol placed in a 250 mL wheatman bottle with 150 mL distilled water. The bottle was capped, agitated for an hour on a Burrell wrist-action shaker, and allowed to settle overnight.			
pH	Not reported			
Results Details Method	Aqueous samples extracted with hexane prior to analysis by GC with FID detector and Carbowax 20M capillary column; LOD=10 ppb			
Standard Deviation Results	Not reported			
Results Details	Not Reported			

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups).
Domain 2: Test Reliab	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	Methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytic methods.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation:	Corning,, Dow (1982). Subject: Monthly summary 10/1982, octanol-water coefficients.
OECD Harmonized	logKow

Template:			
HERO ID: 7310176			
		EXTRACTION	ON
Parameter	Data		
$\log k_{ow}$	3.7 - 4.0		
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	unspecified internal standard; Dow Corn	ing Corp., Midlar	nd, MI; NR; >99%
Temperature	not reported		
System	OECD classical partitioning between 50	mL octanol and 2	250 mL water
pH	not reported		
Results Details Method	FID-GLC		
Standard Deviation Results	not reported		
Results Details	Replicate 1: average concentration in aqu tion in aqueous phase was 358 ppb and c		237 ppb; average concentration in octanol was 395 ppm. Replicate 2: average concentractanol was 580 ppm.
	36.4	EVALUATIO	
Domain	Metric	Rating	Comments
Domain 1: Substance	D	*** 1	
Metric 1:	Representativeness	High	Data are measured for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased	Low	Lacking method details for adequate study interpretation.
Wette 3.	(Method Objectivity)	Low	Lacking method details for adequate study interpretation.
Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods.
		8	
Domain 3: Other			
Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
	• .•		
Overall Quality Determ	ination	Low	

Study Citation:	Corning, Dow (2014). Non-regulated study: DMSD environmental modeling using SIMPLETREAT and QWASI.
OECD Harmonized	logKow

Template:

HERO ID: 9644522

EXTRACTION				
Parameter	Data			
$\log k_{ow}$	-0.38 -			
CASRN and Test Material	1066-42-8; dimethylsilanediol			
Confidentiality, Type, and Guideline	no; not specified; Not reported			
Solvent, Reactivity, Storage, and Stability	lity Not reported; Not reported; Not reported; Not reported			
Radiolabel, Source, State, and Purity	Not reported; Not reported; Not reported Notes: Not reported			
Temperature	20 degrees C			
System	Not reported			
pH	Not reported			
Results Details Method	Not reported			
Standard Deviation Results	Not reported			
Results Details	Cited study reports an average log kow value of -0.41+/-0.10 in Table 2			

			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	The data is consistent with the chemicals other physical/chemical properties.
Domain 2: Test Reliab	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	This metric does not apply to this study type.

Overall Quality Determination

Medium

^{*} Related References: Citing Xu, S. & Kropscott, B., 2012. Method for Simultaneous Determination of Partition Coefficients for Cyclic Volatile Methylsiloxanes and Dimethylsilanediol. Anal. Chem., 84(4), pp. 1948-1955. (HERO ID 2188633)

Study Citation: Dow Chemical, (2022). Partition coefficients for tetramethyldisiloxane-alpha, omega-diol (dimer diol) and hexamethyltrisiloxane-alpha, omega-diol (triu

diol). logKow

Template:

FXTR	ACTION

Parameter	EXTRACTION Data
$\log k_{ow}$	2.512 -
CASRN and Test Material	Not Reported; hexamethyltrisiloxanediol
Confidentiality, Type, and Guideline	No; experimental; Partition coefficients between n-octanol, water, and air at different temperatures based on experimental measurements
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Reported
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Reported
Temperature	35℃
System	n-octanol saturated water solution in a custom-made three-phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL
**	headspace
pH	NR
Results Details Method	High Performance Liquid Chromatograph (HPLC) equipped with an online flow scintillation analyzer
Standard Deviation Results	0.165
Results Details	standard error=0.058

			EVALUATIO	N	
Domain		Metric		Comments	
Domain 1: Substance	:				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.	
Domain 2: Test Relial	bility				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.	
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.	
Domain 3: Other					
Zomani S. Other	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Qual	lity Determi	ination	High		

Overall Quality	y Determination	High

Study Citation: Dow Chemical, (2022). Partition coefficients for tetramethyldisiloxane-alpha,omega-diol (dimer diol) and hexamethyltrisiloxane-alpha,omega-diol (trimer

OECD Harmonized
Template:

logKow

	EXTRACTION
Parameter	Data
$\log k_{ow}$	2.391 -
CASRN and Test Material	Not Reported; hexamethyltrisiloxanediol
Confidentiality, Type, and Guideline	No; experimental; Partition coefficients between n-octanol, water, and air at different temperatures based on experimental measurements
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Reported
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Reported
Temperature	27°C
System	n-octanol saturated water solution in a custom-made three-phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL
	headspace
pН	NR
Results Details Method	High Performance Liquid Chromatograph (HPLC) equipped with an online flow scintillation analyzer
Standard Deviation Results	0.112
Results Details	standard error=0.039

			EVALUATIO	N	
Domain	Metric		Rating	Comments	
Domain 1: Substance					
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.	
Domain 2: Test Reliab	oility				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.	
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.	
Domain 3: Other					
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Qual	ity Determi	ination	High		

Study Citation: Dow Chemical, (2022). Partition coefficients for tetramethyldisiloxane-alpha,omega-diol (dimer diol) and hexamethyltrisiloxane-alpha,omega-diol (trimer

OECD Harmonized Template:

logKow

	EXTRACTION
Parameter	Data
$\log k_{ow}$	2.369 -
CASRN and Test Material	Not Reported; hexamethyltrisiloxanediol
Confidentiality, Type, and Guideline	No; experimental; Partition coefficients between n-octanol, water, and air at different temperatures based on experimental measurements
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Reported
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Reported
Temperature	20°C
System	n-octanol saturated water solution in a custom-made three-phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL
	headspace
pН	NR
Results Details Method	High Performance Liquid Chromatograph (HPLC) equipped with an online flow scintillation analyzer
Standard Deviation Results	0.104
Results Details	standard error=0.024

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

Study Citation: D	Dow Chemical, (2022). Partition c	oefficients for tetramethyldisile	xane-alpha,omega-diol (dimer	r diol) and hexamethyltrisi	loxane-alpha,omega-diol (trimer
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OECD Harmonized Template:

Results Details

diol). logKow

Standard error=0.083

	EXTRACTION	
Parameter	Data	
$\log k_{ow}$	2.125 -	
CASRN and Test Material	Not Reported; hexamethyltrisiloxanediol	
Confidentiality, Type, and Guideline	No; experimental; Partition coefficients between n-octanol, water, and air at different temperatures based on experimental measurements	
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Reported	
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Reported	
Temperature	12°C	
System	n-octanol saturated water solution in a custom-made three-phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL	
	headspace	
pH	NR	
Results Details Method	High Performance Liquid Chromatograph (HPLC) equipped with an online flow scintillation analyzer	
Standard Deviation Results	0.249	

		EVALUATIO	N	
Domain	Metric	Rating	Comments	
Domain 1: Substance				
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.	
Domain 2: Test Reliability				
Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.	
Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.	
Domain 3: Other				
Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.	
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Quality Determ	ination	High		

Study Citation:	Dow Chemical, (2022). Partition coefficients for tetramethyldisiloxane-alpha,omega-diol (dimer diol) and hexamethyltrisiloxane-alpha,omega-diol (trimer
	4:01)

diol). logKow

Template:			
HERO ID: 10709359			
		EXTRACTIO	N
Parameter	Data		
$\log k_{ow}$	0.926 -		
CASRN and Test Material	Not Reported; tetramethyldisiloxanediol		
Confidentiality, Type, and Guideline	No; experimental; Partition coefficients b	etween n-octanol,	water, and air at different temperatures based on experimental measurements
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Report	ed; Not Reported	
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Report	ed; Not Reported	
Temperature	12°C		
System	n-octanol saturated water solution in a cu	stom-made three-p	phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL
	headspace		
pH	NR		
Results Details Method		h (HPLC) equippe	d with an online flow scintillation analyzer
Standard Deviation Results	0.035		
Results Details	Standard error=0.012; Condensation prod HERO ID 9644512	lucts (ex. dimethyl	siloxane- α , ω -diols) were detected, quantified, and the concentrations were reported in
		EVALUATIO	
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-
monte 3.	(Method Objectivity)	111511	tion, and the methodology's objective is clear.
Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to
			OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other	B I	3.6.11	
Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to
Metric 6:	Models	NT/A	original sources.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determi	nation	High	

Study Citation: Dow Chemical, (2022). Partition coefficients for tetramethyldisiloxane-alpha,omega-diol (dimer diol) and hexamethyltrisiloxane-alpha,omega-diol (trimer

OECD Harmonized

logKow

Template: HERO ID:	10709359			
			EXTRACTIO	N
Parameter		Data		
log k _{ow}		1.099 -		
CASRN and Test Mater	ial	Not Reported; tetramethyldisiloxanediol		
Confidentiality, Type, ar	nd Guideline		etween n-octanol,	water, and air at different temperatures based on experimental measurements
Solvent, Reactivity, Stor		Not Reported; Not Reported; Not Report		
Radiolabel, Source, Stat	-	Not Reported; Not Reported; Not Report	_	
Temperature	•	35°C		
System		n-octanol saturated water solution in a cu headspace	stom-made three-p	phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL
pH		NR		
Results Details Method		High Performance Liquid Chromatograph	h (HPLC) equippe	d with an online flow scintillation analyzer
Standard Deviation Res	ults	0.025		
Results Details		Standard error=0.009; Condensation prod HERO ID 9644512	lucts (ex. dimethyl	siloxane- α , ω -diols) were detected, quantified, and the concentrations were reported in
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	;			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Relia	bility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qua	lity Determi	nation	High	

Study Citation:	Dow Chemical, (2022). Partition coefficients for tetramethyldisiloxane-alpha,omega-diol (dimer diol) and hexamethyltrisiloxane-alpha,omega-diol (trimer
	diol)

OECD Harmonized logKow			
Template: HERO ID: 10709359			
		EXTRACTIO	N
Parameter	Data		
$\log k_{ow}$	2.381 -		
CASRN and Test Material	Not Reported; hexamethyltrisiloxanediol		
Confidentiality, Type, and Guideline	No; calculated; Partition coefficients bety	ween n-octanol, wa	ter, and air at different temperatures based on experimental measurements
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Report		
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Report	ed; Not Reported	
Temperature	25°C		
System		ıstom-made three-p	shase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL
	headspace		
pH	NR	1 (HDLC)	
Results Details Method		h (HPLC) equippe	d with an online flow scintillation analyzer
Standard Deviation Results Results Details	Not Reported	latad vaina tamanam	ature dependence parameters from linear regressions of log K on 1/T (K^-1). Conden-
Results Details			cted, quantified, and the concentrations were reported in HERO ID 9644512.
	(,,,		1
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-
medie 3.	(Method Objectivity)	111911	tion, and the methodology's objective is clear.
Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to
			OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other			
Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High
Metric 3.	Databases	iviculuili	designation such as peer-review, public availability, or the inclusion of references to
			original sources.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
	•	774 1	
Overall Quality Determ	ination	High	

Study Citation:	Dow Chemical, (2022). Partition coefficients for tetramethyldisiloxane-alpha,omega-diol (dimer diol) and hexamethyltrisiloxane-alpha,omega-diol (trimer
	diol).

OECD Harmonized Template:

logKow

Template: HERO ID:	10709359			
			EXTRACTIO	N
Parameter		Data		
log k _{ow}		1.018 -		
CASRN and Test Mater	rial	Not Reported; tetramethyldisiloxanediol		
Confidentiality, Type, a	nd Guideline	No; calculated; Partition coefficients between	ween n-octanol, wa	ter, and air at different temperatures based on experimental measurements
Solvent, Reactivity, Sto	rage, and Stability	Not Reported; Not Reported; Not Report	ed; Not Reported	
Radiolabel, Source, Sta	te, and Purity	Not Reported; Not Reported; Not Report	ed; Not Reported	
Temperature		25°C		
System		n-octanol saturated water solution in a cu headspace	ıstom-made three-p	phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL
pH		NR		
Results Details Method			h (HPLC) equippe	d with an online flow scintillation analyzer
Standard Deviation Res	sults	Not Reported		
Results Details				ature dependence parameters from linear regressions of log K on 1/T (K^-1). Condencted, quantified, and the concentrations were reported in HERO ID 9644512.
			EVALUATIO	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Relia	ability			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qua	lity Determi	nation	High	

Study Citation:	Dow Chemical, (2022). Partition coefficients for tetramethyldisiloxane-alpha,omega-diol (dimer diol) and hexamethyltrisiloxane-alpha,omega-diol (trimer

diol). logKow

Template: HERO ID:	10709359			
			EXTRACTIO	N
Parameter		Data		
log k _{ow}		1.036 -		
CASRN and Test Materia	1	Not Reported; tetramethyldisiloxanediol		
Confidentiality, Type, and	l Guideline		etween n-octanol,	water, and air at different temperatures based on experimental measurements
Solvent, Reactivity, Stora		Not Reported; Not Reported; Not Report		
Radiolabel, Source, State	-	Not Reported; Not Reported; Not Report	_	
Temperature	·	27°C	•	
System		n-octanol saturated water solution in a cu headspace	ıstom-made three-p	phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL
pH		NR		
Results Details Method		High Performance Liquid Chromatograp	h (HPLC) equippe	d with an online flow scintillation analyzer
Standard Deviation Resul	ts	0.042		
Results Details		Standard error=0.015; Condensation prod HERO ID 9644512	ducts (ex. dimethyl	siloxane- α , ω -diols) were detected, quantified, and the concentrations were reported in
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliab	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
Zomain J. Guidi	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ity Determi	nation	High	

HERO ID: 10709359 Table: 10 of 10

Study Citation:		, (2022). Partition coefficients for tetramet	thyldisiloxane-al	pha,omega-diol (dimer diol) and hexamethyltrisiloxane-alpha,omega-diol (trime
OECD Harmonized	diol). logKow			
Template:	logitow			
HERO ID:	10709359			
			EXTRACTIO	N
Parameter		Data		
$\log k_{ow}$		0.962 -		
CASRN and Test Material		Not Reported; tetramethyldisiloxanediol		
Confidentiality, Type, and		* ·	netween n-octanol	water, and air at different temperatures based on experimental measurements
Solvent, Reactivity, Storag		Not Reported; Not Reported; Not Report		which, and an at different temperatures caused on experimental measurements
Radiolabel, Source, State,		Not Reported; Not Reported; Not Report	_	
Temperature	y	20°C	,	
System		n-octanol saturated water solution in a cu headspace	ıstom-made three-p	phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL
рН		NR		
		TT: 1 D C T: 1101	1 (IIDI C)	
Results Details Method		High Performance Liquid Chromatograp	n (HPLC) equippe	d with an online flow scintillation analyzer
	s	0.049		
Standard Deviation Result	s	0.049		d with an online flow scintillation analyzer siloxane- α , ω -diols) were detected, quantified, and the concentrations were reported in
Results Details Method Standard Deviation Result Results Details	s	0.049 standard error=0.011; Condensation prod HERO ID 9644512	lucts (ex. dimethyl	siloxane- α , ω -diols) were detected, quantified, and the concentrations were reported in ${\bf N}$
Standard Deviation Result Results Details Domain	s	0.049 standard error=0.011; Condensation prod	ducts (ex. dimethyl	siloxane- α , ω -diols) were detected, quantified, and the concentrations were reported in
Standard Deviation Result Results Details Domain		0.049 standard error=0.011; Condensation prod HERO ID 9644512 Metric	evaluation Rating	siloxane- α , ω -diols) were detected, quantified, and the concentrations were reported in N
Standard Deviation Result Results Details	Metric 1:	0.049 standard error=0.011; Condensation prod HERO ID 9644512 Metric Representativeness	EVALUATION Rating	siloxane- α , ω -diols) were detected, quantified, and the concentrations were reported in N Comments Data are measured or estimated for the subject chemical substance.
Standard Deviation Result Results Details Domain		0.049 standard error=0.011; Condensation prod HERO ID 9644512 Metric	evaluation Rating	siloxane- α , ω -diols) were detected, quantified, and the concentrations were reported in N
Standard Deviation Result Results Details Domain Domain 1: Substance	Metric 1: Metric 2:	0.049 standard error=0.011; Condensation prod HERO ID 9644512 Metric Representativeness	EVALUATION Rating	siloxane- α , ω -diols) were detected, quantified, and the concentrations were reported in N Comments Data are measured or estimated for the subject chemical substance.
Standard Deviation Result Results Details Domain Domain 1: Substance	Metric 1: Metric 2:	0.049 standard error=0.011; Condensation prod HERO ID 9644512 Metric Representativeness	EVALUATION Rating	siloxane- α , ω -diols) were detected, quantified, and the concentrations were reported in N Comments Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features. The methodology for producing the information is designed to answer a specific ques-
Standard Deviation Result Results Details Domain	Metric 1: Metric 2: lity Metric 3:	0.049 standard error=0.011; Condensation prod HERO ID 9644512 Metric Representativeness Appropriateness Reliability/Unbiased (Method Objectivity)	EVALUATION Rating High High	siloxane- α , ω -diols) were detected, quantified, and the concentrations were reported in N Comments Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features. The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
Standard Deviation Result Results Details Domain Domain 1: Substance	Metric 1: Metric 2:	0.049 standard error=0.011; Condensation prod HERO ID 9644512 Metric Representativeness Appropriateness Reliability/Unbiased	EVALUATION Rating High High	siloxane- α , ω -diols) were detected, quantified, and the concentrations were reported in N Comments Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features. The methodology for producing the information is designed to answer a specific ques-
Standard Deviation Result Results Details Domain Domain 1: Substance	Metric 1: Metric 2: lity Metric 3:	0.049 standard error=0.011; Condensation prod HERO ID 9644512 Metric Representativeness Appropriateness Reliability/Unbiased (Method Objectivity)	EVALUATION Rating High High	Siloxane-α,ω-diols) were detected, quantified, and the concentrations were reported in Comments Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features. The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear. Data are obtained by accepted standard analytical methods, including, but not limited to
Standard Deviation Result Results Details Domain Domain 1: Substance Domain 2: Test Reliabi	Metric 1: Metric 2: lity Metric 3:	0.049 standard error=0.011; Condensation prod HERO ID 9644512 Metric Representativeness Appropriateness Reliability/Unbiased (Method Objectivity)	EVALUATION Rating High High	N Comments Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features. The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear. Data are obtained by accepted standard analytical methods, including, but not limited to

Study Citation: OECD Harmonized	Elsevier, (2019). Reaxys: physical-chemical property data for octamethylcyclotetrasiloxane. CAS Registry Number: 556-67-2 logKow					
Template:						
HERO ID:	6984075					
			EXTRACTIO)N		
Parameter		Data				
log k _{ow}		6.98				
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxa	ane			
Confidentiality, Type, and	Guideline	None; Experimental; Not reported				
Solvent, Reactivity, Storage, and Stability		NR; NR; NR; NR				
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR				
Temperature		21.6-21.7°C				
System		Not reported				
pН		Not reported				
Results Details Method		Not reported				
Standard Deviation Result	S	Not reported				
Results Details		4 data points were reported in Reaxys tures.	s; 2 of these values we	ere reported as 6.98 at 21.6-21.7°C; 2 data points were measured at unreported tempera-		
			EVALUATIO	N .		
Domain		Metric	Rating	Comments		
Domain 1: Substance						
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.		

	Metric 1:	Representativeness	підп	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliab	oility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Data range determined from multiple primary sources in REAXYS.

Study Citation: OECD Harmonized	Elsevier, (2021) logKow). Reaxys: physical-chemical property d	ata for dimethylsi	lanediol. CAS Registry Number: 1066-42-8.
Template: HERO ID:	7995011			
HERO ID.	7 7 7 3 3 3 1 1		EVED A CETO	A)
Parameter		Data	EXTRACTIO	N
		Duu		
log k _{ow}		-0.41		
CASRN and Test Material		1066-42-8; Dimethylsilanediol		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storag	ge, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity		NR; NR; NR; NR		
Temperature	•	20.1		
System		Not reported		
pН		Not reported		
Results Details Method		Not reported		
Standard Deviation Results		Not reported		
Results Details		1 value reported in Reaxys.		
Domain		Metric	EVALUATIO Rating	N Comments
Domain 1: Substance	M 1	D	TT' 1	
	Metric 1: Metric 2:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties or behaviors.
Domain 2: Test Reliabi	lity			
2. 100t Reliable	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

^{*} Related References: Xu, Shihe; Kropscott, Bruce; Analytical Chemistry; vol. 84; nb. 4; (2012); p. 1948 - 1955

Study Citation: Kozerski, G., Shawl, H. (2007). Determination of the 1-octanol/water partition coefficient of octamethylcyclotetrasiloxane (D4) by the slow-stirring method

using gas chromatography.

OECD Harmonized

logKow

Template:

	EXTRACTION
Parameter	Data
$\log k_{ow}$	6.488
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane
Confidentiality, Type, and Guideline	None; Experimental; Draft OECD Guideline - Slow Stir Method
Solvent, Reactivity, Storage, and Stability	NR; NR; General storage conditions reported: Room temperature or refrigerated: may also store frozen; keep away from sparks and open flame and heat; NR
Radiolabel, Source, State, and Purity	No; Dow Corning Corporation; Colorless liquid; 99.77±0.002 area percent purity Notes: Commercial product Dow Corning 244 Fluid; D4
Temperature	25.1°C
System	Slow-Stirring Method Using Gas Chromatography and Mass Spectrometry
pН	Not reported
Results Details Method	Aqueous samples: headspace solvent micro-extraction, LOQ: 0.06 ng/mL COV 3.2%; 1-octanol samples: GC-FID, COV 0.53%
Standard Deviation Results	± 0.017
Results Details	at equilibrium

			EVALUATIO:	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliab	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation:	
OTION II	

Kurume Laboratory, (2021). Determination of the n-octanol/water Partition Coefficient of DHDMS (HPLC method).

OECD Harmonized

logKow

Template:

		EXTRACTIO	N		
Parameter	Data				
log k _{ow}	< 0.3 -				
CASRN and Test Material	1066-42-8; Dihydroxydimethylsilane (Dl	HDMS)			
Confidentiality, Type, and Guideline	No; Experimental; OECD Guidelines for Liquid Chromatography (HPLC) Method		als, No.117, April 13, 2004, "Partition Coefficient (n-octanol/water), High Performance		
Solvent, Reactivity, Storage, and Stability	Not reported; Not reported; Not reported	; Not reported			
Radiolabel, Source, State, and Purity	supplied by the Sponsor, purity>99.9%	ed; Not reported N	Notes: Prepared by the hydrolysis of simethoxydimethylsilane (CASRN 1112-39-6,		
Temperature	25 +/- 1 degrees C				
System	Not reported				
pH	Not reported	H: 1:1 (200 B	OL A DID 104		
Results Details Method	High performance liquid chromatograph:	Hitachi L-6200 D	etector: Shimadzu RID-10A		
Standard Deviation Results	Not reported	1 -0.2 (2) d		
Results Details	Reported as log pow <0.2 (on page 4) and <0.3 (on page 3); the partition coefficient of DHDMS is less than that of 2-Butanone, which is 0.3, since the retention time of DHDMS was less than 2-butanone.				
		EVALUATIO	N		
Domain	Metric	Rating	Comments		
Domain 1: Substance					
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
Metric 2:	Appropriateness	High	The data is consistent with the chemicals physical/chemical properties.		
Domain 2: Test Reliability					
Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.		
Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.		
Domain 3: Other					
Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.		
Metric 6:	Models	N/A	This metric does not apply to this study type.		

Study Citation: OECD Harmonized	NCBI, (2021). logKow	PubChem database: compound summary: O	ctamethylcycl	otetrasiloxane.
Template: HERO ID:	6982832			
		H	EXTRACTIO	N
Parameter		Data		
log k _{ow}		6.74		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and C	Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Temperature		Not reported		
System		Not reported		
pН		Not reported		
Results Details Method		Not reported		
Standard Deviation Results		Not reported		
Results Details		average of three measurements		
Domain		I Metric	EVALUATION Rating	N Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or
				other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain 3. Outer	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use or includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	v Dotormi	nation	High	

^{*} Related References: Xu S et al; Environ Sci Technol 48: 11748-11759 (2014)

OECD Harmonized Template:	logKow			
-				
HERO ID:	6982826			
			EXTRACTIO	N
Parameter		Data		
$\log k_{ow}$		6.74		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and Guideline		none; Experimental; Not reported		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State, and Purity		NR; NR; NR		
Temperature		Not reported		
System		Not reported		
рН		Not reported		
Results Details Method		Not reported		
Standard Deviation Results		Not reported		
Results Details		Not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabili	tv			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
				· ·
Domain 3: Other		-		
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	v Determir	nation	High	

^{*} Related References: Physprop

Study Citation:	Xu, S., Kropscott, B. (2012).	Method for simultaneous determination	of partition coefficients fo	r cyclic volatile methy	vlsiloxanes and dimethylsilanediol.

Analytical Chemistry 84(4):1948-1955.

OECD Harmonized

logKow

Template:

HERO ID: 2188633

	EXTRACTION
Parameter	Data
$\log k_{ow}$	-0.41
CASRN and Test Material	Not Reported; Dimethylsilanediol
Confidentiality, Type, and Guideline	None; Experimental; double-syringe apparatus
Solvent, Reactivity, Storage, and Stability	NR; Not Reported; NR; NR
Radiolabel, Source, State, and Purity	14C-dimethylsilanediol (14C-DMSD): specific activity 522.4 mCi/g; Dow Corning; NR; 98% Notes: value is radiochemical purity
Temperature	20.1°C
System	2 air-tight syringes with an air sampling port and a water sampling port; concentration in water (mg/L): 1.53E-3; 1.84E-4
пH	Not reported

pH Not reported
Results Details Method RP HPLC/RAM; LSC

Standard Deviation Results ± 0.10

Results Details equilibrium reached at 20 hours; cryogenic cold trap, dry ice acetone bath

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabi	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation:	Xu, S., Kropscott, B. (2012). Method for simultaneous determination of partition coefficients for cyclic volatile methylsiloxanes and dimethylsilanediol.
	Analytical Chemistry 84(4):1948-1955.

OECD Harmonized

logKow

Template: HERO ID:

2188633

EXTRACTION			
Parameter	Data		
$\log k_{ow}$	6.98		
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and Guideline None; Experimental; double-syringe apparatus			
Solvent, Reactivity, Storage, and Stability NR; 393 mCi/g; NR; NR			
Radiolabel, Source, State, and Purity	C14; Dow Corning; NR; 98.1% Notes: value is radiochemical purity		
Temperature	21.6		
System	2 air-tight syringes with an air sampling port and a water sampling port; concentration in water (mg/L): 1.53E-3; 1.84E-4		
pH	Not reported		
Results Details Method	RP HPLC/RAM; LSC		
Standard Deviation Results	0.15		
Results Details	equilibrium reached at 20 hours; cryogenic cold trap, dry ice acetone bath		

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliab	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation: Xu, S., Kropscott, B. (2012). Method for simultaneous determination of partition coefficients for cyclic volatile methylsiloxanes and dimethylsilanediol. Analytical Chemistry 84(4):1948-1955.

OECD Harmonized

logKow

Template: HERO ID:

2188633

	EXTRACTION
Parameter	Data
$\log k_{ow}$	6.98
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane
Confidentiality, Type, and Guideline	None; Experimental; double-syringe apparatus
Solvent, Reactivity, Storage, and Stability NR; 393 mCi/g; NR; NR	
Radiolabel, Source, State, and Purity C14; Dow Corning; NR; 98.1% Notes: value is radiochemical purity	
Temperature	21.7
System	2 air-tight syringes with an air sampling port and a water sampling port; concentration in water (mg/L): 1.53E-3; 1.84E-4
pH	Not reported
Results Details Method	RP HPLC/RAM; LSC
Standard Deviation Results	0.11
Results Details	equilibrium reached at 20 hours; cryogenic cold trap, dry ice acetone bath

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliab	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination

Study Citation:		Xu, S., Kropscott, B. (2014). Evaluation of the three-phase equilibrium method for measuring temperature dependence of internally consistent partition					
OECD Harmonized	coefficients (KOW, KOA, and KAW) for volatile methylsiloxanes and trimethylsilanol. Environmental Toxicology and Chemistry 33(12):270 D Harmonized logKow						
Template:							
HERO ID:	2535012						
			EXTRACTIO	ON			
Parameter		Data					
1 1		(50. 7.12					
log k _{ow} CASRN and Test Material		6.59 - 7.13					
		556-67-2; Octamethylcyclotetrasiloxane None; Experimental; double-syringe metl	had				
Confidentiality, Type, and Guideline		NR; 393 mCi/g; NR; NR	ilou				
Solvent, Reactivity, Storage, and Stability Radiolabel, Source, State, and Purity		C14; Dow Corning; NR; >98%					
Temperature		5.7; 12.2; 21.7; 34.8°C					
System			ort and a water c	ampling part: concentration in water (ug/L): 1.4.2.0: 0.0.1.3: 0.8.1.5: 1.0.4.0			
pH		2 air-tight syringes with an air sampling port and a water sampling port; concentration in water (ug/L): 1.4-2.0; 0.9-1.3; 0.8-1.5; 1.9-4.0 Not reported					
Results Details Method		RP HPLC/RAM; LSC					
Standard Deviation Results		0.07; 0.07; 0.13; 0.10					
Results Details		Temperature has substantial effects on me	easured partition	coefficients; equilibrium at 6 hours			
ъ.		20.0	EVALUATIO				
Domain		Metric	Rating	Comments			
Domain 1: Substance	3.6 1	D	TT: 1				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.			
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.			
Domain 2: Test Reliabi	lity						
Domain 2. Test Kellaul	Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-			
	Michie J.	(Method Objectivity)	ingii	tion, and the methodology's objective is clear.			
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to			
				OECD guidelines for physical-chemical properties or other developed standard.			
Domain 3: Other							
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.			
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.			
							

High

Study Citation:	
OECD Harmonized	

AG,, Bayer (1990). Contributions on assessment of the aquatic toxicity of OMCTS with cover letter. Water Solubility

OECD Harmonized

Template: HERO ID:

5899898

EXT	'R A	CT	ION	

Parameter	Data
Water Solubility	39 - 47 μg/L
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	No; NR; Liquid; NR
Temperature	Not reported
System	Ion-exchange test water (0-36 ug/L D4) and D4 charged to a Teflon cup are sealed in vessel; gas phase becomes saturated followed by solution saturation; test time varied (24-168 hours)
pH	Not reported
Results Details Method	extracted in n-hexane and analyzed by GC-FID; n-undecane internal standard
Standard Deviation Results	Not reported
Results Details	mean value $42\pm0.9~\mu\text{g/L}$

etric 1: etric 2:	Metric Representativeness Appropriateness	Rating High	Comments Data are measured or estimated for the subject chemical substance.
	1	High	Data are measured or estimated for the subject chemical substance.
	1	High	Data are measured or estimated for the subject chemical substance.
etric 2:	Appropriateness		J
		High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
etric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	(Method Objectivity)		towards a particular product or outcome.
etric 4:	Reliability/Analytical Method	Medium	The analytical method is non-standard but is expected to be appropriate.
etric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
etric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Dotormi	nation	High	
et et et	ric 4:	(Method Objectivity) Reliability/Analytical Method ric 5: Databases	(Method Objectivity) Reliability/Analytical Method Medium ric 5: Databases N/A ric 6: Models N/A

Study Citation:

AG,, Bayer (1990). Contributions on assessment of the aquatic toxicity of OMCTS with cover letter.

OECD Harmonized

Water Solubility

Template: HERO ID:

pН

5899898

Parameter	Data
Water Solubility	27 - 33 μg/L
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	No; NR; Liquid; NR
Temperature	25°C

EXTRACTION

System "ISO" test water and D4 charged to a Teflon cup are sealed in vessel; gas phase becomes saturated followed by solution saturation; test time varied

(48-92 hours) Not reported

Results Details Method extracted in n-hexane and analyzed by GC-FID; n-undecane internal standard

Standard Deviation Results Not reported

Results Details mean value $29.5 \,\mu\text{g/L}$ (n=6)no standard deviation reported

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabi	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is non-standard but is expected to be appropriate.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ity Determ	ination	High	

Study Citation: OECD Harmonized Corning,, Dow (1993). Aqueous solubility of the oligometric permethylsiloxanes with cover letter dated 090893. Water Solubility

Template:

EXTRACTION			
Parameter	Data		
Water Solubility	0.0562 - ppm		
CASRN and Test Material	556-67-2; D4		
Confidentiality, Type, and Guideline	no; experimental; Purge and trap technique		
Solvent, Reactivity, Storage, and Stability	Not reported; Not reported; Not reported		
Radiolabel, Source, State, and Purity	Not reported; DOW CORNING 200(R) Fluid; Not reported; >99% Notes: Purified using spinning band distillation of commercial Dow Corning		
Temperature	fluids 25 degrees C		
System	Not reported		
pH	Not reported		
Results Details Method	Analyzed by direct GC/MS analysis using the SIM mode		
Standard Deviation Results	+/- 2.5 ppb		
Results Details	Converted from 56.20 ±/- 2.5 pph. Also reported as 189.86 pmol/L.		

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	;			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	The measured data is consistent with the chemicals other physical and chemical properties.
Domain 2: Test Relia	bility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is non-standard but is expected to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	This metric does not apply to this study type.
Overall Qua	lity Determ	ination	High	

Study Chanon.	
OECD Harmonized	

Corning,, Dow (1987). The n-octanol/water partition coefficient of octamethylcyclotetrasiloxane with attachment and cover letter dated 092987.

Water Solubility

		.	EXTRACTIO	N		
Parameter		Data				
Water Solubility		ca. 50 ppb				
CASRN and Test Material		556-67-2; D4				
Confidentiality, Type, and Guidel	eline	None; Experimental; Not reported				
Solvent, Reactivity, Storage, and	Storage, and Stability NR; NR; NR					
Radiolabel, Source, State, and Pu	urity	NR; NR; NR; >99.5%				
Temperature		Not reported				
System				a 250 mL wheatman bottle with 150 mL distilled water; bottle capped and agitated for		
		an hour, and allowed to settle overnight.	Process repeated w	vith 1 g D4 in 25 g octanol.		
pH		Not reported				
Results Details Method			prior to analysis by	y GC with FID detector and Carbowax 20M capillary column; LOD = 10 ppb		
Standard Deviation Results		Not reported				
		•				
Results Details		•	f log Kow measure	ment.First determination: 25 ppb in water; second determination: 53 ppb in water		
Results Details		•				
		Water solubility determined as a result o	EVALUATIO	N .		
Domain		•				
Domain Domain 1: Substance	etric 1	Water solubility determined as a result o	EVALUATION Rating	N Comments		
Domain Domain 1: Substance Me	etric 1:	Water solubility determined as a result o Metric Representativeness	EVALUATION Rating	N Comments Data are measured for the subject chemical substance.		
Domain Domain 1: Substance Me	etric 1: etric 2:	Water solubility determined as a result o	EVALUATION Rating	N Comments		
Domain Domain 1: Substance Me Me		Water solubility determined as a result o Metric Representativeness	EVALUATION Rating	N Comments Data are measured for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features		
Domain Domain 1: Substance Me Me		Water solubility determined as a result o Metric Representativeness	EVALUATION Rating	N Comments Data are measured for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features		
Domain Domain 1: Substance Me Me Domain 2: Test Reliability		Water solubility determined as a result of Metric Representativeness Appropriateness Reliability/Unbiased	EVALUATION Rating	N Comments Data are measured for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups). Methodology for producing the information is designed to answer a specific question,		
Domain Domain 1: Substance Me Me Domain 2: Test Reliability Me	etric 2:	Metric Representativeness Appropriateness Reliability/Unbiased (Method Objectivity)	EVALUATION Rating High High High	Data are measured for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups). Methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.		
Domain Domain 1: Substance Me Me Domain 2: Test Reliability Me	etric 2:	Water solubility determined as a result of Metric Representativeness Appropriateness Reliability/Unbiased	EVALUATIO Rating High High	N Comments Data are measured for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups). Methodology for producing the information is designed to answer a specific question,		
Domain Domain 1: Substance Me Me Domain 2: Test Reliability Me Me	etric 2:	Metric Representativeness Appropriateness Reliability/Unbiased (Method Objectivity)	EVALUATION Rating High High High	Data are measured for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups). Methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.		
Domain Domain 1: Substance Me Me Domain 2: Test Reliability Me Me Domain 3: Other	etric 2:	Metric Representativeness Appropriateness Reliability/Unbiased (Method Objectivity)	EVALUATION Rating High High High	Data are measured for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups). Methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.		

Study Citation:	Corning,, Dow (1987). The wa	ter solubility of octamethylcyclotetrasi	lloxane with attachments and cover letter dated 092987.
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OECD Harmonized

Water Solubility

			EVED A CETO	NAT .
Parameter		Data	EXTRACTIO	JN
Water Solubility		40 - 80 ppb		
CASRN and Test Material	l	556-67-2; D4		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storag	ge, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Temperature		Not reported		
System pH				n through a column with sand coated with D4 for 4 or 7 days. An open recirculating acted by shaking a separatory funnel for 30 min.
Results Details Method		1	45 micron filter	Hexane extraction prior to analysis by GC-FID with spitless injection; LOD = 10 ppb;
Results Details Method		89-95% recovery	45 inicion inici.	Tiexane extraction prior to analysis by GC-1 ID with spitiess injection, EOD = 10 ppb,
Standard Deviation Results	s	Not reported		
Results Details				
results Betails				pb (0.45 micron filter)Open recirculating system: 27±3 ppb (possible evaporative opb (0.20 micron filter)D4 is not truly dispersed in water, may be present in various
Tesans Details		loss)Separatory funnel: 8.1-2.9 ppm (un		opb (0.20 micron filter)D4 is not truly dispersed in water, may be present in various
Domain		loss)Separatory funnel: 8.1-2.9 ppm (un	filtered); 28-16 p	opb (0.20 micron filter)D4 is not truly dispersed in water, may be present in various
Domain		loss)Separatory funnel: 8.1-2.9 ppm (un particle sizes.	EVALUATIO	ppb (0.20 micron filter)D4 is not truly dispersed in water, may be present in various
Domain	Metric 1:	loss)Separatory funnel: 8.1-2.9 ppm (un particle sizes.	EVALUATIO	ppb (0.20 micron filter)D4 is not truly dispersed in water, may be present in various
Domain	Metric 1: Metric 2:	loss)Separatory funnel: 8.1-2.9 ppm (un particle sizes. Metric	efiltered); 28-16 p	DPD (0.20 micron filter)D4 is not truly dispersed in water, may be present in various Comments
Domain Domain 1: Substance	Metric 2:	loss)Separatory funnel: 8.1-2.9 ppm (un particle sizes. Metric Representativeness	EVALUATIO Rating High	Data are measured for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features
	Metric 2:	loss)Separatory funnel: 8.1-2.9 ppm (un particle sizes. Metric Representativeness	EVALUATIO Rating High	Data are measured for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features
Domain Domain 1: Substance	Metric 2:	loss)Separatory funnel: 8.1-2.9 ppm (un particle sizes. Metric Representativeness Appropriateness	EVALUATIO Rating High	Comments Data are measured for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups).
Domain Domain 1: Substance	Metric 2:	loss)Separatory funnel: 8.1-2.9 ppm (un particle sizes. Metric Representativeness Appropriateness Reliability/Unbiased	EVALUATIO Rating High	Comments Data are measured for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups). Methodology for producing the information is designed to answer a specific question,
Domain Domain 1: Substance Domain 2: Test Reliabil	Metric 2: lity Metric 3:	loss)Separatory funnel: 8.1-2.9 ppm (un particle sizes. Metric Representativeness Appropriateness Reliability/Unbiased (Method Objectivity)	EVALUATIO Rating High High	Comments Data are measured for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups). Methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
Domain Domain 1: Substance Domain 2: Test Reliabil	Metric 2: lity Metric 3: Metric 4:	loss)Separatory funnel: 8.1-2.9 ppm (un particle sizes. Metric Representativeness Appropriateness Reliability/Unbiased (Method Objectivity) Reliability/Analytical Method	EVALUATIO Rating High High High	Comments Data are measured for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups). Methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear. Data are obtained by accepted standard analytic methods.
Domain Domain 1: Substance	Metric 2: lity Metric 3: Metric 4: Metric 5:	loss)Separatory funnel: 8.1-2.9 ppm (un particle sizes. Metric Representativeness Appropriateness Reliability/Unbiased (Method Objectivity) Reliability/Analytical Method Databases	EVALUATIO Rating High High High High	Comments Data are measured for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups). Methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear. Data are obtained by accepted standard analytic methods. Rating of this factor is not applicable to this kind of information.
Domain Domain 1: Substance Domain 2: Test Reliabil	Metric 2: lity Metric 3: Metric 4:	loss)Separatory funnel: 8.1-2.9 ppm (un particle sizes. Metric Representativeness Appropriateness Reliability/Unbiased (Method Objectivity) Reliability/Analytical Method	EVALUATIO Rating High High High	Comments Data are measured for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups). Methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear. Data are obtained by accepted standard analytic methods.

Study Citation: OECD Harmonized Corning,, Dow (1991). Aqueous solubility studies of octamethylcyclotetrasiloxane.

Water Solubility

Template:

EXTR	ACTION

Parameter	Data
Water Solubility	56 ppb
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane
Confidentiality, Type, and Guideline	None; Experimental; Non-Turbulent Partitioning of D4
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	No; Dow Chemical; Liquid; >99% pure
Temperature	23°C
System	Distilled water placed in a 3-necked flask fitted with a stopcock drain was covered with a 1. 5 cm layer of pure Liquid D4 and stirred very gently and sampled periodically over 87 days.
pН	Not reported
Results Details Method	Purge and Trap with GC/MS
Standard Deviation Results	±3.5 ppb
Results Details	WS ranged from 50-60 ppb

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliab	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ity Determ	ination	High	

Study Citation:	
OECD Harmonized	

Elsevier, (2019). Reaxys: physical-chemical property data for octamethylcyclotetrasiloxane. CAS Registry Number: 556-67-2..

Template:

Water Solubility

Parameter Water Solubility CASRN and Test Material Confidentiality, Type, and Guide Solvent, Reactivity, Storage, and Radiolabel, Source, State, and P Temperature	d Stability	5.6E10 mg/L 556-67-2; Octamethylcyclotetrasiloxane None; Experimental; Not reported NR; NR; NR; NR	EXTRACTION	
CASRN and Test Material Confidentiality, Type, and Guide Solvent, Reactivity, Storage, and Radiolabel, Source, State, and P	d Stability	556-67-2; Octamethylcyclotetrasiloxane None; Experimental; Not reported NR; NR; NR; NR		
CASRN and Test Material Confidentiality, Type, and Guide Solvent, Reactivity, Storage, and Radiolabel, Source, State, and P	d Stability	556-67-2; Octamethylcyclotetrasiloxane None; Experimental; Not reported NR; NR; NR; NR		
Confidentiality, Type, and Guide Solvent, Reactivity, Storage, and Radiolabel, Source, State, and P	d Stability	None; Experimental; Not reported NR; NR; NR; NR		
Solvent, Reactivity, Storage, and Radiolabel, Source, State, and P	d Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and P	-			
	Purity			
Temperature		NR; NR; NR; NR		
		23°C		
System		Not reported		
рН		Not reported		
Results Details Method		Not reported		
Standard Deviation Results		Not reported		
Results Details		reported as 189.86E6 mmol/Lreaxys incorre	ectly extracted the data from the	origional source; should be 189.86E-6 mmol/L
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
M	letric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
M	letric 2:	Appropriateness	Uninformative	Data measured for the subject chemical substance are not consistent with the subject
				chemical substance structural properties, features or behaviors.
Domain 2: Test Reliability				
•	letric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
-1-		(Method Objectivity)	1/10/14/11	towards a particular product or outcome.
M	letric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu-
				sion in a peer-reviewed/recognized database or other secondary source.
Damain 2. Othan				
Domain 3: Other	latuia 5.	Datahasas	High	Date in faces a second and accompanies of date at literature
	letric 5:	Databases	High	Data is from a recognized, peer- reviewed data collection.
M	letric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Varaprath, Sudarsanan; Frye, Cecil L.; Hamelink, Jerry; Environmental Toxicology and Chemistry; vol. 15; nb. 8;(1996); p. 1263 - 1265

Study Citation: OECD Harmonized Template:	Elsevier, (2021) Water Solubility		a for tetramethy	l-1,3-disiloxanediol. CAS Registry Number: 1118-15-6.		
HERO ID:	7994661					
			EXTRACTIO	N		
Parameter		Data				
Water Solubility		110 - 115 g/L				
CASRN and Test Material		1118-15-6; Tetramethyldisiloxanediol				
Confidentiality, Type, and		None; Experimental; Not reported				
Solvent, Reactivity, Storage	•	NR; NR; NR; NR				
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR				
Temperature		20 - 25deg C				
System		Not reported				
pН		Not reported				
Results Details Method		Not reported				
Standard Deviation Results	3	Not reported				
Results Details		3 values reported in Reaxys, reported as 1	00 g solvent (wat	er) dissolves 11 - 11.5 g substance		
			EVALUATIO			
Domain		Metric	Rating	Comments		
Domain 1: Substance						
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties or behaviors.		
Domain 2: Test Reliabil	ity					
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.		
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.		
Domain 3: Other						
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.		
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		
Overall Quali	ty Determi	nation	High			

^{*} Related References: Sokolow 1959; Hyde 1953; Hyde 1953

Study Citation: OECD Harmonized	Elsevier, (2021) Water Solubilit		a for dimethylsi	anediol. CAS Registry Number: 1066-42-8.		
Template: HERO ID:	7995011					
			EXTRACTIO	N		
Parameter		Data				
Water Solubility		2450 g/L				
CASRN and Test Material		1066-42-8; Dimethylsilanediol				
Confidentiality, Type, and	Guideline	None; Experimental; Not reported				
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR				
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR				
Temperature		25°C				
System		Not reported				
pН		Not reported				
Results Details Method		Not reported				
Standard Deviation Results		Not reported				
Results Details		2 values reported in Reaxys; temperature reported for one value only.				
			EVALUATIO	N		
Domain		Metric	Rating	Comments		
Domain 1: Substance						
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties or behaviors.		
				DEMAYOTO.		
Domain 2: Test Reliabil	•	D 1: 1:1: // // 1	N. 1.			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.		
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.		
Domain 3: Other						
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.		
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		

Overall Quality Determination

High

^{*} Related References: Hyde; Journal of the American Chemical Society; vol. 75; (1953); p. 2166

Study Citation:	Gee, R. P. (2015). Emulsion	polymerization of dimethylcyclosiloxane in cationic emulsi	on: Mechanism study utilizing two phase liquid-liquid reaction
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kinetics. Colloids and Surfaces A: Physicochemical and Engineering Aspects 481:297-306.

OECD Harmonized

Water Solubility

Template:

EXTRACTION			
Parameter	Data		
Water Solubility	0.161 mg/L		
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	no; Dow Corning Corp; Liquid; 99.3%		
Temperature	$40^{\circ}\mathrm{C}$		
System	Varprath		
pH	Not reported		
Results Details Method	GC-MS		
Standard Deviation Results	Not reported		
Results Details	reported as 544 nmol/L at 40 C		
	EVALUATION		

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
M	letric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
M	Ietric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliability				
M	Ietric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
M	letric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
M	letric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
M	letric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

termination	His

Study Citation:	Gee, R. P. (2015). Emulsion polymerization of dimethylcyclosiloxane in cationic emulsion: Mechanism study utilizing two phase liquid-liquid reaction
	kinetics. Colloids and Surfaces A: Physicochemical and Engineering Aspects 481:297-306.

OECD Harmonized

Template:

Results Details

Water Solubility

HERO ID: 6833841

EXTRACTION				
Parameter	Data			
Water Solubility	0.40 mg/L			
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane			
Confidentiality, Type, and Guideline	None; Experimental; Not reported			
Solvent, Reactivity, Storage, and Stability	NR; NR; NR			
Radiolabel, Source, State, and Purity	no; Dow Corning Corp; Liquid; 99.3%			
Temperature	60°C			
System	Varprath			
pН	Not reported			
Results Details Method	GC-MS			
Standard Deviation Results	Not reported			

reported as 1348 nmol/L at 60 C

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabi	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation: OECD Harmonized	Environmental Toxicology and Chemistry 20(10):2184-2188.			eaux, L. J. (2001). Air-water partition constants for volatile methyl siloxanes.
Template: HERO ID:	7303416			
			EXTRACTIO)N
Parameter		Data		
Water Solubility		56.2 - ug/L		
CASRN and Test Material	1	Not Reported; Octamethylcyclotetrasilox	ane	
Confidentiality, Type, and	Guideline	None; experimental; NR		
Solvent, Reactivity, Storage, and Stability		NR; NR; NR		
Radiolabel, Source, State, and Purity		NR; NR; Liquid; NR Notes: NR		
Temperature		298K		
System		NR		
pН		NR		
Results Details Method		NR		
Standard Deviation Results		+/-2.5 ug/L		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	N/A	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabi	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	3.5		3.6.11	

* Related References: Citing HERO ID 6990705 and 6984031; entered into Distiller under HERO ID 6984031.

Databases

Models

Metric 4:

Metric 5:

Metric 6:

Overall Quality Determination

Domain 3: Other

Reliability/Analytical Method

Medium

N/A

N/A

High

The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.

Rating of this factor is not applicable to this kind of information.

Rating of this factor is not applicable to this kind of information.

Study Citation: OECD Harmonized	ECD Harmonized Water Solubility			lotetrasiloxane.
Template: HERO ID:	6982832			
]	EXTRACTIO	N
Parameter		Data		
Water Solubility		0.056 mg/L		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storag		NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Temperature	·	23°C		
System		Not reported		
pН		Not reported		
Results Details Method		Not reported		
Standard Deviation Results	s	Not reported		
Results Details		Not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain 3. Other	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use or includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

^{*} Related References: Varaprath S et al; Environ Toxicol Chem 15(8): 1263-1265 (1996)

Study Citation:	
OT OD II	

NCBI, (2021). PubChem database: compound summary: Octamethylcyclotetrasiloxane.

OECD Harmonized

Water Solubility

Template:

\mathbf{E}	XTR	AC'	ΓΙΟΝ

EXTRACTION				
Parameter	Data			
Water Solubility	0.033 mg/L			
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane			
Confidentiality, Type, and Guideline	None; Experimental; Not reported			
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR			
Radiolabel, Source, State, and Purity	NR; NR; NR; NR			
Temperature	25°C			
System	Not reported			
pН	Not reported			
Results Details Method	Not reported			
Standard Deviation Results	Not reported			
Results Details	measured in synthetic seawater			
	DVA I MARKON			

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabili	ty			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: ECHA; Search for Chemicals. Octamethylcyclotetrasiloxane (CAS 556-67-2) Registered Substances Dossier. European Chemical Agency. Available from, as of Aug 17, 2015: http://echa.europa.eu/

Study Citation:		PubChem database: compound summary: O	ctamethylcyclotetrasiloxane.	
OECD Harmonized Template:	Water Solubilit	У		
HERO ID:	6982832			
			EXTRACTION	
Parameter		Data		
Water Solubility		Not Reported		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and		None; Experimental; Not reported		
Solvent, Reactivity, Storag		NR; NR; NR		
Radiolabel, Source, State,		NR; NR; NR; NR		
Temperature	and I drity	Not reported		
System		Not reported		
pH		Not reported		
Results Details Method		Not reported		
Standard Deviation Result	s	Not reported		
Results Details		reported as "none"		
		•		
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	Uninformative	Source reports as "none" which may indicate the compound was not tested.
	Metric 2:	Appropriateness	Low	Data measured for the subject chemical substance are not consistent with the subject chemical substance structural properties, features or behaviors.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer- reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain J. Other	Metric 5:	Databases	High	Data is from a recognized, peer- reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
			- 1/4.4	G. C.
Overall Quali	ty Determi	nation	Uninformative	
	<u> </u>			

^{*} Related References: ILO International Chemical Safety Cards (ICSC)

Study Citation: OECD Harmonized	NLM, (2021). I Water Solubility	Pubchem: 1,3-Disiloxanediol, 1,1,3,3-tetra y	methyl CAS r	egistry number: 1118-15-6.
Template: HERO ID:	7997877			
			EXTRACTIO	N
Parameter		Data		
Water Solubility		0.66 M		
CASRN and Test Material		1118-15-6; Tetramethyldisiloxanediol		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State, a		NR; NR; NR; NR		
Temperature	•	Not reported		
System		Not reported		
pH		Not reported		
Results Details Method		Not reported		
Standard Deviation Results	3	Not reported		
Results Details		Equivalent to 100,000 mg/L based on MW	V 166.32 g/mol	
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance			-	
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	itv			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: EPA DSSTox

Study Citation: OECD Harmonized	NLM, (2021). I Water Solubility	Pubchem: Dimethylsilanediol. CAS registy	try number: 1066	5-42-8.
Template: HERO ID:	7998093			
			EXTRACTIO	N
Parameter		Data		
Water Solubility		10.85 M		
CASRN and Test Material		1066-42-8; Dimethylsilanediol		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage		NR; NR; NR; NR		
Radiolabel, Source, State,	·	NR; NR; NR; NR		
Temperature	and rurity	Not reported		
System		Not reported		
pH		Not reported		
Results Details Method		Not reported		
Standard Deviation Results		Not reported		
Results Details	,	Equivalent to 1,000,000 mg/L based on M	MW 92.17 g/mol	
			EVALUATIO	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	lity			
Domain 2. Test Rendon	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

^{*} Related References: EPA DSSTox

Study Citation:	Rhone-Poulenc, (1990). Environmental fate of D4 with cover letter.
OECD Harmonized	Water Solubility

OECD Harmonized

HERO ID: 5899916			
		EXTRACTION	
Parameter	Data		
Water Solubility	20 - 750 ppb		
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	No; NR; Liquid; NR		
Temperature	15-40°C		
System	OECD like shake flask method. 1-2 day st	ir time; 2-3 day settlin	g time; variable stirring temperature; 15 deg C settling temperature
pH	Not reported		
Results Details Method	extracted in toluene; analyzed by GC/MS		
Standard Deviation Results	270 ppb		
Results Details	Mean value of 330 ppb (n=7). The large of temperature. Detection of microbubbles of		he results cannot be explained by either the duration of the 2 steps or the stirring d.
		EVALUATION	
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased	Low	The methodology indicates that method bias is likely.
	(Method Objectivity)		
Metric 4:	Reliability/Analytical Method	Low	The analytical method described is not appropriate.
Domain 3: Other			
Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
			O
Wette 0.			

Study Citation:

Rhone-Poulenc, (1990). Environmental fate of D4 with cover letter.

OECD Harmonized

Water Solubility

Template:

HERO ID: 5899916

EXTR	AC	LIO	N

Parameter	Data
Water Solubility	15 - 240
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	No; NR; Liquid; NR
Temperature	20°C
System	generator column (EPA like); Chromosorb W 80-100 mesh; glass beads @ 1 mm; glass beads @ 40-70 um
pH	Not reported
Results Details Method	extracted in toluene; analyzed by GC/MS
Standard Deviation Results	Not reported
Results Details	It is impossible to deduce a precise value from the present results.

			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features of other physical/chemical properties or behaviors.
Domain 2: Test Reliab	oility Metric 3:	Reliability/Unbiased	Low	The methodology indicates that method bias is likely.
	Metric 4:	(Method Objectivity) Reliability/Analytical Method	Low	The analytical method described is not appropriate.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination

Medium

HERO ID: 6834101 Table: 1 of 2

Study (Citation:	Sousa, J. V	., Menamara,	P. C., P	utt, A. E.,	Machado.	M. W.,	Surprenant,	D. C	Hamelink,	J. L., Ke	nt, D. J	, Silberhorn	, E. M.	, Hobson,	J. F. (199	5). Effects
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of octamethylcyclotetrasiloxane (OMCTS) on freshwater and marine organisms. Environmental Toxicology and Chemistry 14(10):1639-1647.

OECD Harmonized

Water Solubility

Template:

EVTD	ACTION	

	EXTRACTION				
Parameter	Data				
Water Solubility	$0.074~\mathrm{mg/L}$				
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane				
Confidentiality, Type, and Guideline	None; Experimental; Not reported				
Solvent, Reactivity, Storage, and Stability	NR; NR; The material was stored in the dark at room temperature (approximately 20°C).; NR				
Radiolabel, Source, State, and Purity	no; Dow Corning Corp; Liquid; >99%				
Temperature	Not reported				
System	Column generator				
pH	Not reported				
Results Details Method	Not reported				
Standard Deviation Results	± 9.4				
Results Details	reported as 74 µg/L in freshwater				
	EVALUATION				

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliab	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is described in limited detail but is expected to be appropriate.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation:	Sousa, J. V., Mcnamara, P. C., Putt, A. E., Machado, M. W., Surprenant, D. C., Hamelink, J. L., Kent, D. J., Silberhorn, E. M., Hobson, J. F. (1995). Effects of octamethylcyclotetrasiloxane (OMCTS) on freshwater and marine organisms. Environmental Toxicology and Chemistry 14(10):1639-1647.					
OECD Harmonized	Water Solubility					
Template:						
HERO ID:	6834101					
			EXTRACTIO	N		
Parameter		Data				
Water Solubility		0.033 mg/L				
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane				
Confidentiality, Type, and	Guideline	None; Experimental; Not reported				
Solvent, Reactivity, Storage	e, and Stability	NR; NR; The material was stored in the	dark at room tempe	erature (approximately 20°C).; NR		
Radiolabel, Source, State, a		no; Dow Corning Corp; Liquid; >99%				
Temperature	-	Not reported				
System		Column generator				
pH		Not reported				
Results Details Method		Not reported				
Standard Deviation Results	3	± 3.6				
Results Details		Reported as 33 µg/L in saltwater				
			EVALUATIO	N N		
Domain		Metric	Rating	Comments		
Domain 1: Substance						
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.		
Domain 2: Test Reliabil	ity					
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.		
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is described in limited detail but is expected to be appropriate.		
Domain 3: Other						
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.		
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		
Overall Qualit	ty Determi	nation	High			

Study Citation:
OECD Harmonized

Springborn Laboratories, (1989). Octamethylcyclotetrasiloxane - determination of the water solubility in synthetic seawater.

Water Solubility

Template: HERO ID:	5889412	•						
III.	3007112		EXTRACTIO	N.				
Parameter		Data	EXTRACTIO					
Water Solubility		$29 - > 50 \mu \text{g/L}$						
CASRN and Test Materia	al	556-67-2; Octamethylcyclotetrasiloxane						
Confidentiality, Type, and	d Guideline	None; Experimental; Generator Column	Method Following	g TSCA Test Standard 796.1860 and amendment #1				
Solvent, Reactivity, Stora	ge, and Stability	NR; NR; 20°C in the dark; NR						
Radiolabel, Source, State	, and Purity	No; Dow Corning Corp, MI; Liquid; 99%	to and a second					
Temperature		25°C						
System		simulated seawater; generator column di	rectly coupled to	a purge and trap liquid sample concentrator for GC/MS analysis. Equilibrated for 25				
		hours.						
pH		Not reported	4 201 4 1					
Results Details Method	1,	GC/MS calibrated with quantification on	tne 281 atomic m	ass unit ion.				
Standard Deviation Resu	Its	2	$\pm 3.6~\mathrm{ug/L}$					
Results Details			mean is 33 μg/L for 7 measurements; Mean recovery from fresh and filtered seawater was 96.5±3.99% and 97.3±12.2%; RSD was 8.8 and 1.1% at 5.00 and 20.0 μg/L, respectively. 3 measurements above the limit of detection (50 ug/L) were not included in statistical treatment.					
			EVALUATIO	N				
Domain		Metric	Rating	Comments				
Domain 1: Substance								
	Metric 1:	Representativeness	High	Data are measured for the subject chemical substance.				
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.				
Domain 2: Test Reliab	sility							
Domain 2. Test Kellat	Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-				
	Micuic J.	(Method Objectivity)	IIIgli	tion, and the methodology's objective is clear.				
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to				
		remaining/r mary acar meanod		OECD guidelines for physical-chemical properties or other developed standard.				
Domain 3: Other								
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.				
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.				
Overall Qual	ity Determi	ination	High					

Study Citation:
OECD Harmonized

Springborn Laboratories, (1989). Octamethylcyclotetrasiloxane - determination of the water solubility in freshwater. Water Solubility

Template:

EXTRACTION				
Parameter	Data			
Water Solubility	$60 - > 250 \mu \text{g/L}$			
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane			
Confidentiality, Type, and Guideline	None; Experimental; Generator Column Method Following TSCA Test Standard 796.1860 and amendment #1			
Solvent, Reactivity, Storage, and Stability	NR; NR; 20°C in the dark; NR			
Radiolabel, Source, State, and Purity	No; Dow Corning Corp, MI; Liquid; 99%			
Temperature	25°C			
System	generator column directly coupled to a purge and trap liquid sample concentrator for GC/MS analysis. Equilibrated for 32.5 hours.			
pH	Not reported			
Results Details Method	GC/MS calibrated with quantification on the 281 atomic mass unit ion.			
Standard Deviation Results	$\pm 9.4~\mathrm{ug/L}$			
Results Details	Mean 74 ug/L for 12 measurements; Mean recovery $103\pm12.6\%$. One measurement was above the limit of detection (250 ug/L) and was not included in the statistical treatment.			

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabi	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation: OECD Harmonized Springborn Laboratories, (1989). Octamethycyclotetrasiloxane – Determination of the water solubility in freshwater.

Template:

CD Harmonized Water Solubility

FYTD	ACTION	

Parameter	Data
Water Solubility	74 μg/L
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane
Confidentiality, Type, and Guideline	None; Experimental; Generator Column Method Following TSCA Test Standard 796.1860 and amendment #1
Solvent, Reactivity, Storage, and Stability	NR; NR; 20°C in the dark; NR
Radiolabel, Source, State, and Purity	No; Dow Corning Corp, MI; Liquid; 99%
Temperature	25°C
System	Generator column directly coupled to a purge and trap liquid sample concentrator for GC/MS analysis. Equilibrated for 32.5 hours.
pН	Not reported
Results Details Method	GC/MS calibrated with quantification on the 281 atomic mass unit ion.
Standard Deviation Results	$\pm 9.4~\mu \mathrm{g/L}$
Results Details	Mean 74 μ g/L for 12 measurements; Mean recovery $103\pm12.6\%$

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliab	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation: OECD Harmonized	U.S. EPA, (202 Water Solubility	0). Chemistry dashboard information for O	Octamethylcyclo	otetrasiloxane.
Template:	Water Bordenie.	,		
HERO ID:	6982826			
			EXTRACTIO	N
Parameter		Data		
Water Calubility		0.005 mg/L		
Water Solubility CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
	C: 4-1:	• •		
Confidentiality, Type, and		None; Experimental; Not reported NR; NR; NR; NR		
Solvent, Reactivity, Storage Radiolabel, Source, State, a		NR; NR; NR; NR NR; NR; NR		
	and Purity			
Temperature		Not reported		
System		Not reported		
pH Results Details Method		Not reported Not reported		
Standard Deviation Results		Not reported		
Results Details	•	average of 2 values; 1.69E-8 to 1.70E-8 m	nol/I	
Domain		Metric	EVALUATIO: Rating	N Comments
Domain 1: Substance		Metric	Rung	Comments
Domain 1. Substance	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or
		1.pp.0p		other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	N. ((Method Objectivity)	M 11	towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate The analytical method is non-standard but is expected to be appropriate OR the analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Dotormi	nation	— High	
Over all Quali	y Determi	เมลนปแ	High	

^{*} Related References: PhysProp; Kovdienko, et. al. Molecular informatics 29.5 (2010): 394-406.

Study Citation: OECD Harmonized	U.S. EPA, (2021). Chemistry dashboard information for 1,3-Disiloxanediol, 1,1,3,3-tetramethyl CAS registry number: 1118-15-6. Water Solubility 7995923			
Template:				
HERO ID:				
D		D-4-	EXTRACTIO	N
Parameter		Data		
Water Solubility		0.662 M		
CASRN and Test Material		1118-15-6; Tetramethyldisiloxanediol		
Confidentiality, Type, and Guideline		None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability		NR; NR; NR; NR		
Radiolabel, Source, State, and Purity		NR; NR; NR; NR		
Temperature		Not reported		
System		Not reported		
pΗ		Not reported		
Results Details Method		Not reported		
Standard Deviation Results		Not reported		
Results Details		Equivalent to 110,000 mg/L based on MV	W 166.32 g/mol	
Domain		Matria	EVALUATIO:	
		Metric	Rating	Comments
Domain 1: Substance	Metric 1:	Danragantativanaga	Uiah	Deta are macround on estimated for the cubicat chemical substance
	Metric 2:	Representativeness	High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features
	Metric 2:	Appropriateness	High	(e.g., presence of certain functional groups) or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	lity			
20114111 2. 1000 10114011	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)	1.10010111	towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's
				inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overell Oueli	ty Dotormi	ination	Uigh	
Overall Quality Determination			High	

^{*} Related References: Kovdienko, et. al. Molecular informatics 29.5 (2010): 394-406.

Study	Citation:
OFCE) IIaumaniaa

U.S. EPA, (2021). Chemistry dashboard information for 1,3-Disiloxanediol, 1,1,3,3-tetramethyl-. CAS registry number: 1118-15-6.

OECD Harmonized

Water Solubility

Template:

7995923

HERO ID: 79	95923			
			EXTRACTIO	N
Parameter		Data		
Water Solubility		0.661 M		
CASRN and Test Material		1118-15-6; Tetramethyldisiloxanediol		
Confidentiality, Type, and Guide		None; Experimental; Not reported		
Solvent, Reactivity, Storage, and	•	NR; NR; NR; NR		
Radiolabel, Source, State, and P	urity	NR; NR; NR; NR		
Temperature		Not reported		
System		Not reported		
pН		Not reported		
Results Details Method		Not reported		
Standard Deviation Results		Not reported		
Results Details		Equivalent to 110,000 mg/L based on M	W 166.32 g/mol	
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
Me	etric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Me	etric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features
				(e.g., presence of certain functional groups) or other physical/chemical properties or behaviors.
Domain 2: Test Reliability				
	etric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
1410	cure 3.	(Method Objectivity)	Wicdiani	towards a particular product or outcome.
Mo	etric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's
				inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	etric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
Mo	etric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality I	Determi	nation	High	

^{*} Related References: PhysProp

Study Citation: OECD Harmonized	U.S. EPA, (202 Water Solubilit	1). Chemistry dashboard information for	Dimethylsilaned	liol. CAS registry number: 1066-42-8.
Template:		y		
HERO ID:	7996867			
			EXTRACTIO	N
Parameter		Data		
Water Solubility		11.0 M		
CASRN and Test Materia	.1	1066-42-8; Dimethylsilanediol		
Confidentiality, Type, and	l Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Stora	ge, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State		NR; NR; NR; NR		
Temperature		Not reported		
System		Not reported		
pН		Not reported		
Results Details Method		Not reported		
Standard Deviation Resul	ts	Not reported		
Results Details		Equivalent to 1,010,000 mg/L based on I	MW 92.17 g/mol	
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties or behaviors.
Domain 2: Test Reliab	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ity Determi	nation	High	

^{*} Related References: Kovdienko, et. al. Molecular informatics 29.5 (2010): 394-406.

Study	Citation:
OFCD	Harmonizad

U.S. EPA, (2021). Chemistry dashboard information for Dimethylsilanediol. CAS registry number: 1066-42-8.

OECD Harmonized

Water Solubility

Template: HERO ID:

7996867

Metric 3:

Metric 4:

Metric 5:

		EXTRACTIO	N
Parameter	Data		
Water Solubility	10.8 M		
CASRN and Test Material	1066-42-8; Dimethylsilanediol		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Temperature	Not reported		
System	Not reported		
pН	Not reported		
Results Details Method	Not reported		
Standard Deviation Results	Not reported		
Results Details	Equivalent to 995,000 mg/L based on MV	W 92.17 g/mol	
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties or behaviors.

Medium

Medium

High

There is no indication that the methodology for producing the information was biased

The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.

The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and

towards a particular product or outcome.

use OR includes references to the original sources.

Overall	Quality Determi	nation	High	
	Metric 6:	Models		t applicable to this kind of information.

Reliability/Unbiased

(Method Objectivity) Reliability/Analytical Method

Databases

Domain 3: Other

^{*} Related References: PhysProp

Study Citation: Varaprath, S., Frye, C. L., Hamelink, J. (1996). Aqueous solubility of permethylsiloxanes (silicones). Environmental Toxicology and Chemistry

15(8):1263-1265. Water Solubility

6984031

OECD Harmonized

HERO ID:

Template:

EXTR	ACT	ION

Parameter	Data
Water Solubility	0.0562 ppm
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane
Confidentiality, Type, and Guideline	None; Experimental; non-turbulent method
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; Dow Corning Corp; Aldrich Chemical Co; Hulas America, etc.; NR; NR Notes: distilled only if purity was <99%
Temperature	23 C
System	distilled water; very gentle stirring with magnetic bar to avoid turbulence and cavitation; methanol solutions of pure cmpds by serial dilution
pH	Not reported
Results Details Method	methanol solutions used for calibration; GC-MS purge and trap
Standard Deviation Results	2.50 ppb
Results Details	reported as 56.20 ppb; also aqueous solubility = 189.86 nmol/L

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabili	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation: OECD Harmonized	NCBI, (2021). l Flash Point	PubChem database: compound summary:	Octamethylcyc	lotetrasiloxane.
Template:				
HERO ID:	6982832			
			EXTRACTIO	N
Parameter		Data		
Flash Point		55 C		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and C	Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
System		closed cup		
Standard Deviation Results		Not reported		
Results Details		131°F		
			EVALUATIO	N .
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: Sigma-Aldrich; Safety Data Sheet for Octamethylcyclotetrasiloxane. Product Number: 235695, Version 3.14 (Revision Date 02/28/2015). Available from, as of September 30, 2015: http://www.sigmaaldrich.com/safety-center.html

Study Citation: OECD Harmonized	NCBI, (2021). I Flash Point	PubChem database: compound summary: C	ctamethylcycl	otetrasiloxane.
Template:	riasii Poliit			
HERO ID:	6982832			
HERO ID.	0902032			
			EXTRACTIO	N
Parameter		Data		
Flash Point		56 C		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and C	Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR		
Radiolabel, Source, State, a	-	NR; NR; NR; NR		
System	•	Not reported		
Standard Deviation Results		Not reported		
Results Details		Not reported		
				A.Y.
Domain		Metric	EVALUATIO Rating	Comments
Domain 1: Substance			8	
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	itv			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
· · · · · · · · · · · · · · · · · · ·	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	v Determi	nation	High	

^{*} Related References: ILO International Chemical Safety Cards (ICSC)

Study Citation: OECD Harmonized	RSC, (2020). Ch Flash Point	nemSpider: Octamethylcyclotetrasiloxane.		
Template:	rasii roiiit			
HERO ID:	6982833			
			EXTRACTIO	N
Parameter		Data		
Flash Point		57 C		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and C	Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
System		Not reported		
Standard Deviation Results	;	Not reported		
Results Details		Not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: OU Chemical Safety Data (No longer updated)

Study Citation:	RSC, (2020). ChemSpider: Octamethylcyclotetrasiloxane.
OECD Harmonized	Flash Point
Template:	
HERO ID:	6982833

		EXTRACTION
Parameter	Data	
Flash Point	56 C	
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane	
Confidentiality, Type, and Guideline	none; Experimental; Not reported	
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR	
Radiolabel, Source, State, and Purity	NR; NR; NR; NR	
System	Not reported	
Standard Deviation Results	Not reported	
Results Details	Not reported	

EVALUATION					
Domain		Metric	Rating	Comments	
Domain 1: Substance	2				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.	
Domain 2: Test Relia	ability				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.	
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.	
Domain 3: Other					
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Qua	lity Determ	ination	High		

* Related References: Alfa Aesar

Study Citation:	RSC, (2020). ChemSpider: Octamethyl	lcvclotetrasiloxane.
OECD Harmonized	Flash Point	.,
Template:		
HERO ID:	6982833	
		EXTRACTION
Parameter	Data	
Flash Point	56 C	

CASRN and Test Material 556-67-2; Octamethylcyclotetrasiloxane
Confidentiality, Type, and Guideline none; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability NR; NR; NR; NR
Radiolabel, Source, State, and Purity NR; NR; NR
System Not reported
Standard Deviation Results Not reported
Results Details Not reported

EVALUATION					
Domain	Metric	Rating	Comments		
Domain 1: Substance					
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.		
Domain 2: Test Reliability					
Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased		
	(Method Objectivity)		towards a particular product or outcome.		
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.		
Domain 3: Other					
Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.		
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		
Overall Quality Detern	ningtion	High			

* Related References: Oakwood

Study Citation:	
OECD Harmonized	
TI1-4	

RSC, (2020). ChemSpider: Octamethylcyclotetrasiloxane.

Template:

Flash Point

HERO ID:	6982833				
EXTRACTION					
Parameter		Data			
Flash Point		54 C			
CASRN and Test Materi		556-67-2; Octamethylcyclotetrasiloxane			
Confidentiality, Type, an		none; Experimental; Not reported			
Solvent, Reactivity, Stor		NR; NR; NR; NR			
Radiolabel, Source, State	e, and Purity	NR; NR; NR; NR			
System		Not reported			
Standard Deviation Resu	ılts	Not reported			
Results Details		Not reported			
			EVALUATIO	N	
Domain		Metric	Rating	Comments	
Domain 1: Substance					
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.	
Domain 2: Test Relia	bility				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.	
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.	
Domain 3: Other					
_ :::::::::::::::::::::::::::::::::::::	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Qual	lity Determi	nation	High		

^{*} Related References: LabNetwork

Study Citation:	Elsevier, (2019). Reaxys: physical-chemical property data for octamethylcyclotetrasiloxane. CAS Registry Number: 556-67-2
OECD Harmonized	Viscosity

Template:

EXTRACTION					
Parameter	Data				
Viscosity	2.187 - 2.239				
CASRN and Test Material	556-67-2; Octamethylcyclotetrasilo	oxane			
Confidentiality, Type, and Guideline	None; Experimental; Not reported				
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR				
Radiolabel, Source, State, and Purity	NR; NR; NR; NR				
Temperature	25-25.1				
Test Conditions	Not reported				
Standard Deviation Results	Not reported				
Results Details	13 values were reported in Reaxy measured at unreported or non-star	•	ed in the range of 2.187-2.239 cP at 25-25.1°C; 9 values were outside this range or		
		EVALUATIO	N		
Domain	Metric	Rating	Comments		
Domain 1: Substance					
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.		

Metric Representativeness Appropriateness Reliability/Unbiased (Method Objectivity)	Rating High N/A Medium	Comments Data are measured or estimated for the subject chemical substance. Rating of this factor is not applicable to this kind of information. There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Appropriateness Reliability/Unbiased (Method Objectivity)	N/A	Rating of this factor is not applicable to this kind of information. There is no indication that the methodology for producing the information was biased
Appropriateness Reliability/Unbiased (Method Objectivity)	N/A	Rating of this factor is not applicable to this kind of information. There is no indication that the methodology for producing the information was biased
Reliability/Unbiased (Method Objectivity)	· · · · · · · · · · · · · · · · · · ·	There is no indication that the methodology for producing the information was biased
(Method Objectivity)	Medium	
(Method Objectivity)	Medium	
		towards a particular product of outcome.
Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
Models	N/A	Rating of this factor is not applicable to this kind of information.
		Models N/A

Study Citation:	Liu, F., Beer, de, S., Ende, v.d., D., Mugele, F. (2013). Atomic force microscopy of confined liquids using the thermal bending fluctuations of the cantilever.
	Physical Review E (Statistical, Nonlinear, and Soft Matter Physics) 87(6):062406.

Viscosity

Template:

EXTRACTION	

Parameter	EXTRACTION Data
Viscosity	2.7
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	no; Fluka; Liquid; ≥99.0%
Temperature	300 K
Test Conditions	Atomic force microscopy
Standard Deviation Results	$\pm 0.2~\mathrm{mPa.s}$
Results Details	2.7 mPa-s

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliab	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation: OECD Harmonized	NCBI, (2021). Viscosity	PubChem database: compound summary:	Octamethylcyc	lotetrasiloxane.
Template: HERO ID:	6982832			
			EXTRACTIO	N .
Parameter		Data		
Viscosity		2.21		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Temperature		25°C		
Test Conditions		Not reported		
Standard Deviation Result	S	Not reported		
Results Details		reported as 2.30 cSt, assumed density 0.90	6 g/cm3	
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

^{*} Related References: Butts M et al; Silicones. Kirk-Othmer Encyclopedia of Chemical Technology. (1999-2015). New York, NY: John Wiley & Sons. Online Posting Date: Dec 20, 2002.

Study Citation:	Palczewska-Tulinska, M., Oracz, P. (2005).	Selected physicochemical properties of hexamethylcyclotrisiloxane, octamethylcyclotetrasiloxane, and de-
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camethylcyclopentasiloxane. Journal of Chemical and Engineering Data 50(5):1711-1719.

OECD Harmonized

Viscosity

Template:

EXTRACTION	

Parameter	Data
Viscosity	2.45
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	no; 99% dried, sieved, rectified, boiled refluxed.; Liquid; 99.98%
Temperature	293.15 K
Test Conditions	Hoeppler viscosimeter
Standard Deviation Results	$\pm 0.009~\sigma$ (n/mPa-s)
Results Details	reported as 2.45 mPa-s at 293.15 K; Ranged from 2.45-0.41 mPa-s at 293.15-423.15 K.

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation: OECD Harmonized Template:	Elsevier, (2019) Refractive Inde		a for octamethyl	cyclotetrasiloxane. CAS Registry Number: 556-67-2		
HERO ID:	6984075					
			EXTRACTIO	N		
Parameter		Data				
Refractive Index		1.3935 - 1.4013				
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane				
Confidentiality, Type, and (Guideline	None; Experimental; Not reported				
Solvent, Reactivity, Storage		NR; NR; NR				
Radiolabel, Source, State, a	-	NR; NR; NR; NR				
Temperature	and I direy	19.99-25°C				
System		Not reported				
Standard Deviation Results		Not reported				
Results Details		•	alues were reporte	d in the range of 1.3935 to 1.4013 at 19.99-25°C; 7 values were outside this range or		
resums Demins		measured at unreported or non-standard temperatures.				
Results Details Methods		Not Reported				
Parameter		Not Reported				
			EVALUATIO	N		
Domain		Metric	Rating	Comments		
Domain 1: Substance			<u> </u>			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.		
Domain 2: Test Reliabil	itv					
2. 100t Rendon	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased		
		(Method Objectivity)	1110010111	towards a particular product or outcome.		
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.		
Domain 3: Other						
Domain J. Onici	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.		
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		
Overall Qualit	ty Determi	nation	High			

^{*} Related References: Data range determined from multiple primary sources in REAXYS.

Study Citation: OECD Harmonized Template:	Elsevier, (2021). Reaxys: physical-chemical property data for 1,1,3,3,5,5,7,7-octamethyltetrasiloxane-1,7-diol. CAS Registry Number: 3081-07-0. Refractive Index						
HERO ID:	7991715						
		1	EXTRACTIO	N			
Parameter		Data					
Refractive Index		1.4054 - 1.4088					
CASRN and Test Material		3081-07-0; Octamethyltetrasiloxanediol					
Confidentiality, Type, and	Guideline	None; Experimental; Not reported					
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR					
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR					
Temperature	·	20-25°C					
System Standard Deviation Results		Not reported					
		Not reported					
Results Details		3 values were reported in Reaxys, 589 nm					
Results Details Methods		Not Reported					
Parameter		Not Reported					
			EVALUATIO:	N			
Domain		Metric	Rating	Comments			
Domain 1: Substance							
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.			
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.			
Domain 2: Test Reliabil	lity						
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.			
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.			
Domain 3: Other							
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.			
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.			
Overall Quali	ty Determi	nation	High				

^{*} Related References: Harris 1963; Andrianov, K.A. et al.; Bulletin of the Academy of Sciences of the USSR Division of Chemical Science; (1962); p. 2144 - 2146; Sokolow; Zhurnal Obshchei Khimii; vol. 29; (1959); p. 258,261, 263;engl. Ausg. S. 262, 265, 266

Study Citation: OECD Harmonized	Elsevier, (2021) Refractive Inde		a for 1,1,3,3,5,5	-hexamethyltrisiloxane-1,5-diol. CAS Registry Number: 3663-50-1.			
Template: HERO ID:	7992314						
			EXTRACTIO	N			
Parameter		Data					
Refractive Index		1.405 - 1.409					
CASRN and Test Material		3663-50-1; Hexamethyltrisiloxanediol					
Confidentiality, Type, and C	Guideline	None; Experimental; Not reported					
Solvent, Reactivity, Storage		NR; NR; NR					
Radiolabel, Source, State, a		NR; NR; NR					
Temperature		20-25°C					
System		Not reported					
Standard Deviation Results	,	Not reported					
Results Details		*	6 values were reported in Reaxys in the range of 1.405 - 1.409, 589 nm				
Results Details Methods		Not Reported					
Parameter		Not Reported					
Domain		Metric	EVALUATIO: Rating	N Comments			
Domain 1: Substance			8				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.			
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.			
Domain 2: Test Reliabil	•						
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased			
	N. (·)	(Method Objectivity)	3.4.1	towards a particular product or outcome.			
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.			
Domain 3: Other							
Domain 3. Outer	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and			
	Metric 6:	Models	N/A	use OR includes references to the original sources. Rating of this factor is not applicable to this kind of information.			
	wichie U.	14104015	1 \ //A	racing of any factor is not appricable to this killed of information.			
Overall Qualit	tv Determi	nation	High				

^{*} Related References: Voronokov et al. 1971; Kaufman and Karlin 1970; Union Carbide Patent 1965; Harris 1963; Andrianov 1962; Sokolow 1959

Study Citation: OECD Harmonized	Elsevier, (2021) Refractive Inde		ta for tetramethy	l-1,3-disiloxanediol. CAS Registry Number: 1118-15-6.				
Template: HERO ID:	7994661							
11210 121	7771001		EXTRACTIO	N.				
Parameter		Data	EATRACTIO					
Refractive Index		1.457 - 1.466						
CASRN and Test Material		1118-15-6; Tetramethyldisiloxanediol						
Confidentiality, Type, and	Guideline	None; Experimental; Not reported						
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR						
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR						
Temperature		25°C						
System		Not reported						
Standard Deviation Results	S	Not reported						
Results Details		2 values reported in Reaxys: 1.457 - 1.46	61 (n1) and 1.462 -	1.466 (n2), 589.3 nm				
Results Details Methods		Not Reported						
Parameter		Not Reported						
			EVALUATIO	N				
Domain		Metric	Rating	Comments				
Domain 1: Substance								
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.				
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.				
Domain 2: Test Reliabil	itv							
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased				
		(Method Objectivity)		towards a particular product or outcome.				
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.				
Domain 3: Other								
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.				
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.				
0 110 11	1 D.4.	4 •	TT' 1					
Overall Quality	ty Determi	nation	High					

^{*} Related References: Hyde; Journal of the American Chemical Society;vol. 75; (1953); p. 2166, View in Reaxys; GmelinHandbuch der Anorganischen Chemie; vol. Si:MVol.C; 91, page 248 - 251

Study Citation: OECD Harmonized Template:	Elsevier, (2021) Refractive Inde		ta for dimethylsil	lanediol. CAS Registry Number: 1066-42-8.			
HERO ID:	7995011						
			EXTRACTIO	N			
Parameter		Data					
Refractive Index		1.444 - 1.456					
CASRN and Test Material		1066-42-8; Dimethylsilanediol					
Confidentiality, Type, and C	Guideline	None; Experimental; Not reported					
Solvent, Reactivity, Storage, and Stability		NR; NR; NR					
Radiolabel, Source, State, and Purity Temperature System Standard Deviation Results		NR; NR; NR; NR					
		25°C					
		Not reported					
		Not reported					
Results Details		2 values were reported in Reaxys; 1.444 - 1.448 (n2) and 1.452 - 1.456 (n1), 589.3 nm Not Reported					
Results Details Methods							
Parameter		Not Reported					
			EVALUATIO	N			
Domain		Metric	Rating	Comments			
Domain 1: Substance							
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.			
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.			
Domain 2: Test Reliabil	ity						
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.			
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.			
Domain 3: Other							
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.			
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.			
Overall Qualit	tv Determi	nation	High				

^{*} Related References: Hyde; Journal of the American Chemical Society;vol. 75; (1953); p. 2166

Study Citation:	Haynes, W.,.M. (2014). Octamethylcyclotetrasiloxane. :3-424.
OFCD Harmonized	Pafraatiya Inday

Refractive Index

Template:

		EXTRACTIO	N
Parameter	Data		
Refractive Index	1.3968		
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Геmperature	20°C/D		
System	Not reported		
Standard Deviation Results	Not reported		
Results Details	Not reported		
Results Details Methods	Not Reported		
Parameter	Not Reported		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance		-	
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation: OECD Harmonized	NCBI, (2021). P Refractive Index	ubChem database: compound summary:	Octamethylcyc	lotetrasiloxane.
Template:				
HERO ID:	6982832			
			EXTRACTIO	N
Parameter		Data		
Refractive Index		1.3968		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and C	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Temperature		20 C/D		
System		Not reported		
Standard Deviation Results		Not reported		
Results Details		Not reported		
Results Details Methods		Not Reported		
Parameter		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determin	nation	High	

^{*} Related References: Haynes, W.M. (ed.). CRC Handbook of Chemistry and Physics. 95th Edition. CRC Press LLC, Boca Raton: FL 2014-2015, p. 3-424

Study Citation:	(
OECD Harmonized]

O'Neil, M. J. (2013). Octamethylcyclotetrasiloxane. :1255.

OECD Harn Template:

Refractive Index

Domain 1: Substance Metric 1: Representativeness High Data are measured or estimated for the subject chemical substance. Metric 2: Appropriateness N/A Rating of this factor is not applicable to this kind of information. Domain 2: Test Reliability Metric 3: Reliability/Unbiased (Method Objectivity) Metric 4: Reliability/Analytical Method Medium Analytical method is unknown but is likely to be appropriate based on the sion in a peer-reviewed/recognized database or other secondary source. Metric 5: Databases High The information or data is from a recognized data collection/repository we peer-reviewed by experts in the field, are broadly available to the public for use.			EXTRACTIO	N
CASRN and Test Material Confidentiality, Type, and Guideline Solvent, Reactivity, Storage, and Stability NR; NR; NR; NR System Not reported Standard Deviation Results Seaults Details Not reported Standard Deviation Results Seaults Details Not Reported Not Reported Not Reported Not Reported Not Reported Not	Parameter	Data		
Confidentiality, Type, and Guideline Solvent, Reactivity, Storage, and Stability NR; NR; NR; NR Radiolabel, Source, State, and Purity Temperature 20°C/D System Not reported Standard Deviation Results Not reported Results Details Not reported Results Details Not Reported Not Reported Not Reported Not Reported Metric 1: Representativeness Metric 2: Appropriateness N/A Rating of this factor is not applicable to this kind of information. Domain 2: Test Reliability Metric 4: Reliability/Analytical Method Metric 4: Reliability/Analytical Method Metric 5: Databases Metric 5: Databases Metric 5: Databases None; Experimental; Not reported NR; NR; NR; NR Representative Results Results Details Results Details Results Details Results Details Not reported Results Details Not reported Results Details Not Reported EVALUATION EVALUATION Domain 1: Substance Results Data are measured or estimated for the subject chemical substance. N/A Rating of this factor is not applicable to this kind of information. Domain 2: Test Reliability Metric 3: Reliability/Unbiased (Method Objectivity) Metric 4: Reliability/Analytical Method Medium Analytical method is unknown but is likely to be appropriate based on the sion in a peer-reviewed/recognized database or other secondary source. Domain 3: Other Metric 5: Databases High The information or data is from a recognized data collection/repository we peer-reviewed by experts in the field, are broadly available to the public fouse.	Refractive Index	1.3968		
Solvent, Reactivity, Storage, and Stability RR: NR: NR: NR Radiolabel, Source, State, and Purity NR: NR: NR: NR Remperature 20°C/D System Not reported Standard Deviation Results Not reported Results Details Results Details Methods Not Reported Not Reported Not Reported Results Details Methods Parameter Not Reported Results Details Methods Parameter Not Reported Metric 1: Representativeness High Data are measured or estimated for the subject chemical substance. Metric 2: Appropriateness N/A Rating of this factor is not applicable to this kind of information. Domain 2: Test Reliability Metric 3: Reliability/Unbiased (Method Objectivity) Metric 4: Reliability/Analytical Method Medium Analytical method is unknown but is likely to be appropriate based on the sion in a peer-reviewed/recognized database or other secondary source. Domain 3: Other Metric 5: Databases High The information or data is from a recognized data collection/repository we peer-reviewed by experts in the field, are broadly available to the public for use.	CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane		
Radiolabel, Source, State, and Purity Emperature 20°C/D System Not reported Standard Deviation Results Not reported Results Details Results Details Methods Parameter Not Reported Domain Metric Representativeness Metric 2: Appropriateness N/A Rating of this factor is not applicable to this kind of information. Metric 3: Reliability/Unbiased (Method Objectivity) Metric 4: Reliability/Analytical Method Metric 5: Databases Metric 5: Metric 5: Databases NR;	Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Temperature 20°C/D System Not reported Standard Deviation Results Not reported Results Details Not reported Results Details Methods Not Reported Parameter Not Reported Parameter Not Reported Not Re	Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
System Not reported Standard Deviation Results Results Details Results Details Results Details Methods Parameter Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Metric 1: Representativeness Metric 2: Appropriateness N/A Rating of this factor is not applicable to this kind of information. Domain 2: Test Reliability Metric 3: Reliability/Unbiased (Method Objectivity) Metric 4: Reliability/Analytical Method Medium Metric 4: Reliability/Analytical Method Medium Analytical method is unknown but is likely to be appropriate based on the sion in a peer-reviewed/recognized database or other secondary source. Domain 3: Other Metric 5: Databases High The information or data is from a recognized data collection/repository we peer-reviewed by experts in the field, are broadly available to the public for use.	Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Standard Deviation Results Results Details Results Details Results Details Results Details Methods Results Details Methods Parameter Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported EVALUATION Rating Comments Domain 1: Substance Metric 1: Representativeness Metric 2: Appropriateness N/A Rating of this factor is not applicable to this kind of information. Domain 2: Test Reliability Metric 3: Reliability/Unbiased (Method Objectivity) Metric 4: Reliability/Analytical Method Medium Analytical method is unknown but is likely to be appropriate based on the sion in a peer-reviewed/recognized database or other secondary source. Domain 3: Other Metric 5: Databases High The information or data is from a recognized data collection/repository we peer-reviewed by experts in the field, are broadly available to the public for use.	Геmperature	20°C/D		
Results Details Methods Not Reported Not Retric 2: Domain 1: Substance	System	Not reported		
Results Details Methods Parameter Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported EVALUATION Rating Comments Domain 1: Substance Metric 1: Representativeness High Data are measured or estimated for the subject chemical substance. Metric 2: Appropriateness N/A Rating of this factor is not applicable to this kind of information. Domain 2: Test Reliability Metric 3: Reliability/Unbiased (Method Objectivity) Metric 4: Reliability/Analytical Method Medium Analytical method is unknown but is likely to be appropriate based on the sion in a peer-reviewed/recognized database or other secondary source. Domain 3: Other Metric 5: Databases High The information or data is from a recognized data collection/repository we peer-reviewed by experts in the field, are broadly available to the public for use.	Standard Deviation Results	Not reported		
Parameter Not Reported EVALUATION Domain Metric Rating Comments Domain 1: Substance Metric 1: Representativeness High Data are measured or estimated for the subject chemical substance. Metric 2: Appropriateness N/A Rating of this factor is not applicable to this kind of information. Domain 2: Test Reliability Metric 3: Reliability/Unbiased (Method Objectivity) Metric 4: Reliability/Analytical Method Medium There is no indication that the methodology for producing the information towards a particular product or outcome. Medium Analytical method is unknown but is likely to be appropriate based on the sion in a peer-reviewed/recognized database or other secondary source. Domain 3: Other Metric 5: Databases High The information or data is from a recognized data collection/repository w peer-reviewed by experts in the field, are broadly available to the public for use.	Results Details	Not reported		
Domain 1: Substance Metric 1: Representativeness High Data are measured or estimated for the subject chemical substance. Metric 2: Appropriateness N/A Rating of this factor is not applicable to this kind of information. Domain 2: Test Reliability Metric 3: Reliability/Unbiased (Method Objectivity) Metric 4: Reliability/Analytical Method Medium Analytical method is unknown but is likely to be appropriate based on the sion in a peer-reviewed/recognized database or other secondary source. Metric 5: Databases High The information or data is from a recognized data collection/repository we peer-reviewed by experts in the field, are broadly available to the public for use.	Results Details Methods	Not Reported		
Domain 1: Substance Metric 1: Representativeness High Data are measured or estimated for the subject chemical substance. Metric 2: Appropriateness N/A Rating of this factor is not applicable to this kind of information. Domain 2: Test Reliability Metric 3: Reliability/Unbiased (Method Objectivity) Metric 4: Reliability/Analytical Method Medium Analytical method is unknown but is likely to be appropriate based on the sion in a peer-reviewed/recognized database or other secondary source. Metric 5: Databases Metric 5: Databases High The information or data is from a recognized data collection/repository we peer-reviewed by experts in the field, are broadly available to the public for use.	Parameter	Not Reported		
Domain 1: Substance Metric 1: Representativeness High Data are measured or estimated for the subject chemical substance. Metric 2: Appropriateness N/A Rating of this factor is not applicable to this kind of information. Domain 2: Test Reliability Metric 3: Reliability/Unbiased (Method Objectivity) Metric 4: Reliability/Analytical Method Medium There is no indication that the methodology for producing the information towards a particular product or outcome. Medium Analytical method is unknown but is likely to be appropriate based on the sion in a peer-reviewed/recognized database or other secondary source. Domain 3: Other Metric 5: Databases High The information or data is from a recognized data collection/repository we peer-reviewed by experts in the field, are broadly available to the public fouse.			EVALUATIO	N
Metric 1: Representativeness Metric 2: Appropriateness N/A Rating of this factor is not applicable to this kind of information. Domain 2: Test Reliability Metric 3: Reliability/Unbiased (Method Objectivity) Metric 4: Reliability/Analytical Method Medium Analytical method is unknown but is likely to be appropriate based on the sion in a peer-reviewed/recognized database or other secondary source. Metric 5: Databases High Data are measured or estimated for the subject chemical substance. N/A Rating of this factor is not applicable to this kind of information. Medium There is no indication that the methodology for producing the information towards a particular product or outcome. Medium Analytical method is unknown but is likely to be appropriate based on the sion in a peer-reviewed/recognized database or other secondary source. Domain 3: Other Metric 5: Databases High The information or data is from a recognized data collection/repository we peer-reviewed by experts in the field, are broadly available to the public for use.	Domain	Metric	Rating	Comments
Metric 2: Appropriateness N/A Rating of this factor is not applicable to this kind of information. Domain 2: Test Reliability Metric 3: Reliability/Unbiased (Method Objectivity) Metric 4: Reliability/Analytical Method Medium There is no indication that the methodology for producing the information towards a particular product or outcome. Medium Analytical method is unknown but is likely to be appropriate based on the sion in a peer-reviewed/recognized database or other secondary source. Domain 3: Other Metric 5: Databases High The information or data is from a recognized data collection/repository we peer-reviewed by experts in the field, are broadly available to the public fouse.	Domain 1: Substance			
Domain 2: Test Reliability Metric 3: Reliability/Unbiased (Method Objectivity) Metric 4: Reliability/Analytical Method Medium There is no indication that the methodology for producing the information towards a particular product or outcome. Medium Analytical method is unknown but is likely to be appropriate based on the sion in a peer-reviewed/recognized database or other secondary source. Domain 3: Other Metric 5: Databases High The information or data is from a recognized data collection/repository we peer-reviewed by experts in the field, are broadly available to the public for use.	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 3: Reliability/Unbiased (Method Objectivity) Metric 4: Reliability/Analytical Method Medium There is no indication that the methodology for producing the information towards a particular product or outcome. Medium Analytical method is unknown but is likely to be appropriate based on the sion in a peer-reviewed/recognized database or other secondary source. Domain 3: Other Metric 5: Databases High The information or data is from a recognized data collection/repository w peer-reviewed by experts in the field, are broadly available to the public fouse.	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
(Method Objectivity) towards a particular product or outcome. Metric 4: Reliability/Analytical Method Medium Analytical method is unknown but is likely to be appropriate based on the sion in a peer-reviewed/recognized database or other secondary source. Domain 3: Other Metric 5: Databases High The information or data is from a recognized data collection/repository w peer-reviewed by experts in the field, are broadly available to the public for use.	Domain 2: Test Reliability			
Metric 4: Reliability/Analytical Method Medium Analytical method is unknown but is likely to be appropriate based on the sion in a peer-reviewed/recognized database or other secondary source. Domain 3: Other Metric 5: Databases High The information or data is from a recognized data collection/repository w peer-reviewed by experts in the field, are broadly available to the public for use.	Metric 3:		Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 5: Databases High The information or data is from a recognized data collection/repository w peer-reviewed by experts in the field, are broadly available to the public for use.	Metric 4:		Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Metric 5: Databases High The information or data is from a recognized data collection/repository w peer-reviewed by experts in the field, are broadly available to the public for use.	Domain 3: Other			
Matric 6: Models N/A Pating of this feator is not applicable to this kind of information		Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
Wether 6. Wodels IVA Rating of this factor is not applicable to this kind of information.	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

RSC, (2020). ChemSpider: Octamethylcyclotetrasiloxane.

Study Citation:

OECD Harmonized	Refractive Index			
Template: HERO ID:	6982833			
		E	XTRACTIO	ON
Parameter		Data		
Refractive Index		1.396		
CASRN and Test Material	l	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storag	ge, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Temperature		Not reported		
System		Not reported		
Standard Deviation Result	ts	Not reported		
Results Details		Not reported		
Results Details Methods		Not Reported		
Parameter		Not Reported		
		F	EVALUATIO	ON
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.

	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabili	ity			
Domain 2. Test Renaum	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Alfa Aesar

Study Citation:
OFCD Harmania

RSC, (2020). ChemSpider: Octamethylcyclotetrasiloxane.

OECD Harmonized

Refractive Index

Template: HERO ID: 6982833			
]	EXTRACTIO	N
Parameter	Data		
Refractive Index	1.396		
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity	NR: NR: NR		
Temperature	Not reported		
System	Not reported		
Standard Deviation Results	Not reported		
Results Details	Not reported		
Results Details Methods	Not Reported		
Parameter	Not Reported		
		EVALUATIO:	
Domain	Metric	Rating	Comments
Domain 1: Substance	.	*** 1	
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	(Method Objectivity)		towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.

^{*} Related References: Sigma-Aldrich

Study Citation:	Zhang, Y., Dong, H., V	Wu, C., Yu, L., Xu, J. (2015).	5). The mixing properties of 1,3,5-trimethyl-1,3,5-tris(3,3,3-trifluoropropyl) cyclotrisiloxane with various

organosilicon compounds at different temperatures. Journal of Chemical Thermodynamics 81:16-25. Refractive Index

OECD Harmonized

Template:

	EXTRACTION
Parameter	Data
Refractive Index	1.39674
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	no; Dow Corning; Liquid; 0.995 mass fraction Notes: measured by Gas and Liquid Chromatography.
Temperature	293.15 K
System	Automatically analyzed using a DMA4500/RXA170 combined system(Anton Paar) with a refractive index uncertainty of ± 0.00004 nD.
Standard Deviation Results	Not reported
Results Details	Reported as 1.39674 at 293.15 K; also measured at 1.38925-1.37917 over 308.15-328.15 K, respectively.
Results Details Methods	Not Reported
Parameter	Not Reported

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabi	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation: OECD Harmonized	Corning,, Dow (2014). Non-regulated study: DMSD environmental modeling using SIMPLETREAT and QWASI. Henry's Law						
Template:	3						
HERO ID:	9644522						
			EXTRACTION				
Parameter		Data					
Henry's Law		Not Reported					
CASRN and Test Material		1066-42-8; D4					
Confidentiality, Type, and	Guideline	no; Not specified; Not reported					
Solvent, Reactivity, Storag	e, and Stability	Not reported; Not reported; Not reported	; Not reported				
Radiolabel, Source, State,	and Purity	Not reported; Not reported; Not reported	; Not reported Notes: No	ot reported			
Temperature		20 degrees C					
pН		Not reported					
System		Not reported					
Standard Deviation Results	s	Not reported					
Results Details		Log Kaw = -6.94					
Results Details Methods		Not reported					
			EVALUATION				
Domain		Metric	Rating	Comments			
Domain 1: Substance							
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.			
	Metric 2:	Appropriateness	High	The data is consistent with the chemicals other physical/chemical properties.			
Domain 2: Test Reliabil	lity						
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.			
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.			
Domain 3: Other							
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.			
	Metric 6:	Models	N/A	This metric does not apply to this study type.			
Overall Quali	ty Determi	nation	Medium				

^{*} Related References: Citing Xu, S. & Kropscott, B., 2012. Method for Simultaneous Determination of Partition Coefficients for Cyclic Volatile Methylsiloxanes and Dimethylsilanediol. Anal. Chem., 84(4), pp. 1948-1955. (HERO ID 2188633)

Study	Citation:	

Corning,, Dow (2014). Non-regulated study: DMSD environmental modeling using SIMPLETREAT and QWASI.

OECD Harmonized

Henry's Law

Template: HERO ID:

9644522

Parameter	Data
Henry's Law	1.74E-4 - Pa-m3/mol
CASRN and Test Material	1066-42-8; D4
Confidentiality, Type, and Guideline	no; Not specified; Not reported
Solvent, Reactivity, Storage, and Stability	Not reported; Not reported; Not reported
Radiolabel, Source, State, and Purity	Not reported; Not reported; Not reported Notes: Not reported
Temperature	25 degrees C
рН	Not reported

EXTRACTION

Temperature	25 degrees C
pH	Not reported
System	Not reported
Standard Deviation Results	Not reported
Results Details	Not Reported
Results Details Methods	Not reported

			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	The data is consistent with the chemicals other physical/chemical properties.
Domain 2: Test Reliabi	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	This metric does not apply to this study type.

Overall Quality Determination

Medium

^{*} Related References: Citing Xu, S., 2011. Temperature Dependence of Air/Water, 1-Octanol/Air, 1-Octanol/Water Partitioning Coefficients of Dimethylsilanediol (DMSD) (CAS No: 1066-42-8), s.l.: s.n. (No HERO ID)

Study Citation:	Dow Chemical, (2022). Partition coefficients for	tetramethyldisiloxane-alpha,or	mega-diol (dimer diol) and hexan	nethyltrisiloxane-alpha,omega-diol (trimer

diol). Henry's Law

Template:

EXT	'R A	C	ГT	ON	J

Parameter	EXTRACTION Data
Henry's Law	4.16E-07 (Calculated by reviewer based on reported log Kaw values) - atm-m3/mol
CASRN and Test Material	Not Reported; tetramethyldisiloxanediol
Confidentiality, Type, and Guideline	No; calculated; Partition coefficients between n-octanol, water, and air at different temperatures based on experimental measurements
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Reported; Not Reported
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Reported
Temperature	25°C
pН	Not Reported
System	n-octanol saturated water solution in a custom-made three-phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL
	headspace
Standard Deviation Results	0.324
Results Details	Reported as log KAW = -4.769 ; were calculated using temperature dependence parameters from linear regressions of log K on $1/T$ (K^-1)
Results Details Methods	High Performance Liquid Chromatograph (HPLC) equipped with an online flow scintillation analyzer

			EVALUATIO:	N
Domain		Metric	Rating	Comments
Domain 1: Substance	;			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features
Domain 2: Test Relia	bility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qual	lity Determi	ination	High	

Study Citation:	Dow Chemical, (2022). Partition coefficients for tetramethyldisiloxane-alpha,omega-diol (dimer diol) and hexamethyltrisiloxane-alpha,omega-diol (trimer
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diol). Henry's Law

Template: HERO ID:

10709359

EXTRACTION					
Parameter	Data				
Henry's Law	1.73E-07 (Calculated by reviewer based on reported log Kaw values) - atm-m3/mol				
CASRN and Test Material	Not Reported; tetramethyldisiloxanediol				
Confidentiality, Type, and Guideline	No; experimental; Partition coefficients between n-octanol, water, and air at different temperatures based on experimental measurements				
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Reported				
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Reported				
Temperature	27°C				
pH	Not Reported				
System	n-octanol saturated water solution in a custom-made three-phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL headspace				
Standard Deviation Results	0.038				
Results Details	Reported as $\log KAW = -5.153$				
Results Details Methods	High Performance Liquid Chromatograph (HPLC) equipped with an online flow scintillation analyzer				

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features
Domain 2: Test Relial	bility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qual	lity Determ	ination	High	

Study Citation:	Dow Chemical, (2022), Partition coefficients for tetramethyldisiloxane-alpha,omega-diol (dimer diol) and hexamethyltrisiloxane-alpha,omega-diol ((trimer

diol). Henry's Law

Template: HERO ID: 10709359

EXTRACTION				
Parameter	Data			
Henry's Law	1.91E-06 (Calculated by reviewer based on reported log Kaw values) - atm-m3/mol			
CASRN and Test Material	Not Reported; hexamethyltrisiloxanediol			
Confidentiality, Type, and Guideline	No; calculated; Partition coefficients between n-octanol, water, and air at different temperatures based on experimental measurements			
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Reported			
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Reported; Not Reported			
Temperature	25°C			
pH	Not Reported			
System	n-octanol saturated water solution in a custom-made three-phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL headspace			
Standard Deviation Results	0.270			
Results Details	Reported as log KAW = -4.107; Weighted mean and pooled standard error for all experimental observations of log KAW; no significant temperature dependence was detected.			
Results Details Methods	High Performance Liquid Chromatograph (HPLC) equipped with an online flow scintillation analyzer			

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	;			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features
Domain 2: Test Relia	bility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qua	lity Determ	ination	High	

Study Citation:	Dow Chemical, (2022). Partition coefficients for tetramethyldisiloxane-alpha,omega-diol (dimer diol) and hexamethyltrisiloxane-alpha,omega-diol (trimer
	diol)

OECD Harmonized Template:

diol). Henry's Law

EXTRACTION				
Parameter	Data			
Henry's Law	2.58E-07 (Calculated by reviewer based on reported log Kaw values) - atm-m3/mol			
CASRN and Test Material	Not Reported; tetramethyldisiloxanediol			
Confidentiality, Type, and Guideline	No; experimental; Partition coefficients between n-octanol, water, and air at different temperatures based on experimental measurements			
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Reported			
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Reported			
Temperature	12°C			
pH	Not Reported			
System	n-octanol saturated water solution in a custom-made three-phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL			
	headspace			
Standard Deviation Results	0.037			
Results Details	Reported as $\log KAW = -4.957$			
Results Details Methods	High Performance Liquid Chromatograph (HPLC) equipped with an online flow scintillation analyzer			

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	;			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features
Domain 2: Test Relia	bility			
	Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-
		(Method Objectivity)		tion, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qual	lity Determ	ination	High	

Study Citation:	Dow Chemical, (2022). Partition coefficients for tetramethyldisiloxane-alpha,omega-diol (dimer diol) and hexamethyltrisiloxane-alpha,omega-diol (trimer
	dial)

diol). Henry's Law

		EXTRACTIO	NAT		
Parameter	Data	EXTRACTIO	JIN		
Henry's Law	5.25E-07 (Calculated by reviewer ba	ased on reported log Ka	aw values) - atm-m3/mol		
CASRN and Test Material	Not Reported; tetramethyldisiloxane	ediol			
Confidentiality, Type, and Guideline	No; experimental; Partition coefficie	ents between n-octanol,	, water, and air at different temperatures based on experimental measurements		
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Re	eported; Not Reported			
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Re	eported; Not Reported			
Temperature	20°C				
pH	Not Reported				
System	n-octanol saturated water solution in a custom-made three-phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL				
	headspace				
Standard Deviation Results	0.064				
Results Details	Reported as $\log KAW = -4.661$				
Results Details Methods	High Performance Liquid Chromatograph (HPLC) equipped with an online flow scintillation analyzer				
		EVALUATIO	N .		
Domain	Metric	Rating	Comments		
Domain 1: Substance					
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features		
	-				
Domain 2: Test Reliability					
Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.		

	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features
Domain 2: Test Relial	oility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation:	Dow Chemical, (2022). Partition coefficients for tetramethyldisiloxane-alpha,omega-diol (dimer diol) and hexamethyltrisiloxane-alpha,omega-diol (trimer
	diol).
OECD Harmonized	Henry's Law

OECD Harmonized Template: HERO ID:

10709359

	EXTRACTION				
Parameter	Data				
Henry's Law	1.37E-06 (Calculated by reviewer based on reported log Kaw values) - atm-m3/mol				
CASRN and Test Material	Not Reported; hexamethyltrisiloxanediol				
Confidentiality, Type, and Guideline	No; experimental; Partition coefficients between n-octanol, water, and air at different temperatures based on experimental measurements				
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Reported				
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Reported				
Temperature	35°C				
pH	Not Reported				
System	n-octanol saturated water solution in a custom-made three-phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL				
	headspace				
Standard Deviation Results	0.174				
Results Details	Reported as log KAW = -4.266				
Results Details Methods	High Performance Liquid Chromatograph (HPLC) equipped with an online flow scintillation analyzer				

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	;			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Relia	bility			
	Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-
		(Method Objectivity)		tion, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qua	lity Determ	ination	High	

Study Citation:	Dow Chemical, (2022). Partition coefficients for tetramethyldisiloxane-alpha,omega-diol (dimer diol) and hexamethyltrisiloxane-alpha,omega-diol (trimer
OECD Harmonized	diol). Henry's Law
Template:	
HERO ID:	10709359

EXTRACTION		
Parameter	Data	
Henry's Law	1.13E-06 (Calculated by reviewer based on reported log Kaw values) - atm-m3/mol	
CASRN and Test Material	Not Reported; hexamethyltrisiloxanediol	
Confidentiality, Type, and Guideline	No; experimental; Partition coefficients between n-octanol, water, and air at different temperatures based on experimental measurements	
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Reported	
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Reported	
Temperature	27°C	
pH	Not Reported	
System	n-octanol saturated water solution in a custom-made three-phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL	
	headspace	
Standard Deviation Results	0.127	
Results Details	Reported as log KAW = -4.340	
Results Details Methods	High Performance Liquid Chromatograph (HPLC) equipped with an online flow scintillation analyzer	

Metric Representativeness Appropriateness	Rating High High	Comments Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features.
•	-	•
•	-	•
Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
Models	N/A	Rating of this factor is not applicable to this kind of information.
_	Reliability/Analytical Method Databases	Reliability/Analytical Method High Databases Medium Models N/A

Study Citation:	Dow Chemical, (2022). Partition coefficients for tetramethyldisiloxane-alpha,omega-diol (dimer diol) and hexamethyltrisiloxane-alpha,omega-diol (trimer diol).
OECD Harmonized	Henry's Law
Template:	
HERO ID:	10709359

EXTRACTION		
Parameter	Data	
Henry's Law	1.23E-06 (Calculated by reviewer based on reported log Kaw values) - atm-m3/mol	
CASRN and Test Material	Not Reported; hexamethyltrisiloxanediol	
Confidentiality, Type, and Guideline	No; experimental; Partition coefficients between n-octanol, water, and air at different temperatures based on experimental measurements	
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Reported	
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Reported	
Temperature	20°C	
pH	Not Reported	
System	n-octanol saturated water solution in a custom-made three-phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL	
	headspace	
Standard Deviation Results	0.090	
Results Details	Reported as log KAW = -4.291	
Results Details Methods	High Performance Liquid Chromatograph (HPLC) equipped with an online flow scintillation analyzer	

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	;			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features
Domain 2: Test Relia	bility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determination			High	

Study Citation:	Dow Chemical, (2022). Partition coefficients for tetramethyldisiloxane-alpha,omega-diol (dimer diol) and hexamethyltrisiloxane-alpha,omega-diol (trimer diol).
OECD Harmonized	Henry's Law
Template:	
HERO ID:	10709359

EXTRACTION		
Parameter	Data	
Henry's Law	1.12E-06 (Calculated by reviewer based on reported log Kaw values) - atm-m3/mol	
CASRN and Test Material	Not Reported; hexamethyltrisiloxanediol	
Confidentiality, Type, and Guideline	No; experimental; Partition coefficients between n-octanol, water, and air at different temperatures based on experimental measurements	
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Reported	
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Reported	
Temperature	12℃	
pН	Not Reported	
System	n-octanol saturated water solution in a custom-made three-phase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL	
	headspace	
Standard Deviation Results	0.136	
Results Details	Reported as log KAW = -4.320	
Results Details Methods	High Performance Liquid Chromatograph (HPLC) equipped with an online flow scintillation analyzer	

EVALUATION				
Domain		Metric	Rating	Comments
Domain 1: Substance	2			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features
Domain 2: Test Relia	bility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qua	lity Determ	ination	High	

HERO ID: 10709359 Table: 10 of 10

Study Citation: Dow Chemical, (2022). Partition coefficients for tetramethyldisiloxane-alpha,omega-diol (dimer diol) and hexamethyltrisiloxane-alpha,omega-diol	trimer
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Study Citation:	diol).	(2022). Tartition coefficients for tetrame	Anyidishoxane-ar	pna,omega-dioi (dimer dioi) and nexamethyltrisiloxane-aipna,omega-dioi (trimer			
OECD Harmonized Template:	Henry's Law						
HERO ID:	10709359						
			EXTRACTIO	N			
Parameter		Data					
Honey's Low		1.20E.06 (Calculated by raviower based	l on rapartad lag Ka	uu valuaa) atm m²/mal			
Henry's Law CASRN and Test Material		1.39E-06 (Calculated by reviewer based on reported log Kaw values) - atm-m3/mol Not Reported; tetramethyldisiloxanediol					
Confidentiality, Type, and (Guideline			water, and air at different temperatures based on experimental measurements			
Solvent, Reactivity, Storage		Not Reported; Not Reported; Not Report		water, and an at different temperatures based on experimental incusarements			
Radiolabel, Source, State, a		Not Reported; Not Reported; Not Report	_				
Temperature	and I direct	35°C	itea, riot rieportea				
рН		Not Reported					
System		1	ustom-made three-r	hase equilibrium vessel with a separate water-saturated n-octanol phase and a 100 mL			
•		headspace	•				
Standard Deviation Results		0.095					
Results Details		Reported as $\log KAW = -4.261$					
Results Details Methods		High Performance Liquid Chromatograp	ph (HPLC) equippe	d with an online flow scintillation analyzer			
			EVALUATIO	N			
Domain		Metric	Rating	Comments			
Domain 1: Substance							
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.			
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.			
Domain 2: Test Reliabil	ity						
	Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-			
		(Method Objectivity)		tion, and the methodology's objective is clear.			
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.			
Domain 3: Other							
Zomani J. Oulei	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.			
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.			
Overall Qualit	tv Determin	nation	High				

Study Citation:	Hamelink, J. L., Simon, P. B., Silberhorn, E. M. (1996).	Henry's law constant, volatilization rate, and aquatic half-life of octamethylcyclotetrasiloxane.
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Environmental Science & Technology 30(6):1946-1952. Henry's Law

OECD Harmonized

		EXTRACTIO	ON .			
Parameter	Data					
Henry's Law	3.4					
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane					
Confidentiality, Type, and Guideline	none; Experimental; Not Reported					
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR					
Radiolabel, Source, State, and Purity	NR; NR; NR; NR					
Temperature	20°C					
pН	Not reported					
System	Dynamic experiments with syringes attac conditions and continuously rotated.	ched to 60 cm dia	meter circular rack of variable speed laboratory rotator. Apparatus housed in light-free			
Standard Deviation Results	\pm 1.37					
Results Details	ts Details Undimensional Henry's law constant was 3.4 ± 1.37 (grand mean over 5 experiments)					
Results Details Methods	Initial concentrations ranging from 4 to 50 μ g/L (20°C; 48 hour equilibration period). Purge and trap apparatus Tekmar LSC 2000 with automated sampler. GC conditions: Varian 3740, FID detector, helium carrier, D4 retention time 11.4 min.					
		EVALUATIO	N .			
Domain	Metric	Rating	Comments			
Domain 1: Substance						
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.			
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.			
Domain 2: Test Reliability						
Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.			
Metric 4:	Reliability/Analytical Method High Data are obtained by accepted standard analytical methods, inclu OECD guidelines for physical-chemical properties or other deve					
D : 2 04						
Domain 3: Other		NT/A	Rating of this factor is not applicable to this kind of information.			
Domain 3: Other Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.			

Study Citat	ation: Kochetkov.	A., Smith, J. S	Ravikrishna. R	Valsara	. K. T.	 Thibodeaux. 	L. J. ((2001).	. Air-water	partition con	nstants for volatile i	nethyl siloxanes.
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Environmental Toxicology and Chemistry 20(10):2184-2188. Henry's Law

OECD Harmonized

		EXTRACTIO	N
Parameter	Data		
II	22 24		
Henry's Law CASRN and Test Material	ca. 23 - ca. 24	mathydayalatatmadlayana	
Confidentiality, Type, and Guideline		nethylcyclotetrasiloxane ental; Non-guideline	
Solvent, Reactivity, Storage, and Sta			
Radiolabel, Source, State, and Purity		ng (Midland, MI); NR; 99%	
Temperature	28°C (301K)	ig (Wildiand, Wif), INK, 99 %	
рН	Not reported		
System	•	re method (HS) and modified batch air stripping	method (vapor entry loop method VEL) used for direct measurement of Henrys
by stem	law constant (di	11 0	neurou (vapor entry 100p metrou v <i>EE)</i> used for direct measurement of fremys
Standard Deviation Results	reported with de	etails on results	
Results Details			for comparison several literature values were reported = 9.6 ± 2.1 , 5.6 ± 0.9 , >17 ,
			WS data = 259; source is internally inconsistent and reports different values for
Results Details Methods		ent at different locations in text calibrated with pure D4 in methanol	
Tresum Demin Michigan	111 DO WILLIAM	, canorated with pure 2 i in medianor	
		EVALUATIO	 N
Domain	Metric	Rating	
Domain 1: Substance			
Domain 1: Substance Metric	1: Representative	eness High	Data are measured for the subject chemical substance.
	1	E	Data are measured for the subject chemical substance. Measured data are consistent with the subject chemical substance structural feature.
Metric	1	E	•
Metric Metric	1	ess High	Measured data are consistent with the subject chemical substance structural feature
Metric	2: Appropriatene 3: Reliability/Un	ess High ubiased Medium	Measured data are consistent with the subject chemical substance structural featurents. There is no indication that the methodology for producing the information was big
Metric Metric Domain 2: Test Reliability Metric	2: Appropriatene 3: Reliability/Un (Method Obje	biased Mediun ctivity)	Measured data are consistent with the subject chemical substance structural featurent matter is no indication that the methodology for producing the information was bis towards a particular product or outcome.
Metric Metric Domain 2: Test Reliability	2: Appropriatene 3: Reliability/Un (Method Obje	ess High ubiased Medium	Measured data are consistent with the subject chemical substance structural featurents. There is no indication that the methodology for producing the information was bistowards a particular product or outcome.
Metric Metric Domain 2: Test Reliability Metric Metric	2: Appropriatene 3: Reliability/Un (Method Obje	biased Mediun ctivity)	Measured data are consistent with the subject chemical substance structural featurent matter is no indication that the methodology for producing the information was bis towards a particular product or outcome.
Metric Metric Domain 2: Test Reliability Metric Metric	2: Appropriatene 3: Reliability/Un (Method Obje 4: Reliability/An	biased Mediun ctivity)	Measured data are consistent with the subject chemical substance structural feature. There is no indication that the methodology for producing the information was bistowards a particular product or outcome. The results reported are inconsistent and the methodology is not reliable for use.
Metric Metric Domain 2: Test Reliability Metric Metric Domain 3: Other	2: Appropriatene 3: Reliability/Un (Method Obje 4: Reliability/An 5: Databases	sss High abiased Mediun ctivity) allytical Method Uninforms	Measured data are consistent with the subject chemical substance structural feature. There is no indication that the methodology for producing the information was bistowards a particular product or outcome. The results reported are inconsistent and the methodology is not reliable for use. Rating of this factor is not applicable to this kind of information.
Metric Domain 2: Test Reliability Metric Metric Domain 3: Other Metric	2: Appropriatene 3: Reliability/Un (Method Obje 4: Reliability/An 5: Databases	sss High abiased Mediun ctivity) halytical Method Uninforma N/A	Measured data are consistent with the subject chemical substance structural feature. There is no indication that the methodology for producing the information was bistowards a particular product or outcome. The results reported are inconsistent and the methodology is not reliable for use.

Study Citation: OECD Harmonized	NCBI, (2021). I Henry's Law	PubChem database: compound summary:	Octamethylcyc	lotetrasiloxane.
Template:				
HERO ID:	6982832			
			EXTRACTIO	N
Parameter		Data		
Henry's Law		12.00 atm-m3/mol		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and		none; Experimental; Not reported		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Temperature		Not reported		
pH		Not reported		
System		Not reported		
Standard Deviation Result	s	Not reported		
Results Details		Not reported		
Results Details Methods		Not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabi	litv			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	3.5	(Method Objectivity)	3.6.11	towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
J. 3444	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	tv Determi	nation	High	
S TOTAL Quali	-J =		8	

^{*} Related References: EPA DSSTox

Study Citation: OECD Harmonized	NCBI, (2021). Henry's Law	PubChem database: compound summary:	Octamethylcyc	lotetrasiloxane.
Template:	Helliy S Law			
HERO ID:	6982832			
HERO ID:	0702032		DVMD 4 CMYO	A.
Damana a4 an		Data	EXTRACTIO	N
Parameter		Data		
Henry's Law		13.4 atm-m3/mol		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Temperature		25°C		
pН		Not reported		
System		Not reported		
Standard Deviation Result	s	Not reported		
Results Details		Not reported		
Results Details Methods		Not reported		
Damain		Matria	EVALUATIO	
Domain		Metric	Rating	Comments
Domain 1: Substance	Matria 1.	Dammagantativanass	High	Determined an estimated for the multipated manifest and an estimated
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:		Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	he analytical method is unknown but is the analytical method is unknown but is likely to be appropriate likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
20 3. 00.01	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

^{*} Related References: Xu S, Kropscott B; Environ Toxicol Chem 33(12): 2702-10 (2014)

Study Citation:	Services,, A.A., Inc., (2000). Phase II studies of the Henry's law constant of OMCTS (octamethylcyclotetrasiloxane).

OECD Harmonized

Henry's Law

Template:

HERO ID: 5889409

		EXTRACTIO	ON CONTRACTOR OF THE PROPERTY			
Parameter	Data					
Henry's Law	1.23 - 7.66					
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxan	ıe.				
Confidentiality, Type, and Guideline	None; Experimental; Not Reported					
Solvent, Reactivity, Storage, and Stabi						
Radiolabel, Source, State, and Purity	No; NR; Liquid; >99.9% (w/w) Notes:	· OMCTS: lot numb	ner DC-1088			
Temperature	10-25°C	. OMC13, lot liullit	MI DC-1000			
рН	Not reported					
System	Initial concentration 40 μg/L; air/water ratio was 20/80; equilibration period 48 hours					
Standard Deviation Results	$\pm 0.12, \pm 0.84, \pm 1.06, \pm 2.61$ at temperatures of 10, 15, 20, 25°C, respectively.					
Results Details	Mean Hc (undimensional) at temperatures of 10, 15, 20, 25°C were 1.35, 2.38, 2.98, 4.78, respectively. Mean recoveries were 79.8, 80.9, 7					
Results Details	84.5% for respective temperatures.					
Results Details Methods		purge and trap/GC-FID following standard methods 601 and 8010 with modifications for OMCTS				
		EVALUATIO				
Domain	Metric	Rating	Comments			
Domain 1: Substance						
Metric		High	Data are measured or estimated for the subject chemical substance.			
Metric 2	2: Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or			
			other physical/chemical properties or behaviors.			
Domain 2: Test Reliability						
Metric 3	3: Reliability/Unbiased	High	There is no indication that the methodology for producing the information was biased			
	(Method Objectivity)	5	towards a particular product or outcome.			
Metric 4		High	The analytical method is based EPA guidelines with analytical methods adjusted for the test substance.			
Domain 3: Other						
Metric :	5: Databases	N/A	Rating of this factor is not applicable to this kind of information.			
Metric (N/A N/A	Rating of this factor is not applicable to this kind of information.			
METIC	J. IVIOUCIS	1 V/ /1	rating of this factor is not applicable to this kind of information.			

Study Citation: Services,, A.A., Inc., (2000). Phase II studies of the Henry's law constant of OMCTS (octamethylcyclotetrasiloxane).

OECD Harmonized

Henry's Law

		EXTRACTIO	N .					
Parameter	Data							
Henry's Law	0.98 - 4.18							
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane							
Confidentiality, Type, and Guideline	None; Experimental; Not Reported							
Solvent, Reactivity, Storage, and Stability	Methanol; NR; Refrigerated; 1 year							
Radiolabel, Source, State, and Purity	No; NR; Liquid; >99.9% (w/w) Notes: OMCTS; lot number DC-1088							
Temperature	20°C							
pH	Not reported							
System	Initial concentration 4-32 µg/L; air/water ratio was 20/80; equilibration period 48 hours							
Standard Deviation Results	$\pm 1.38, \pm 0.73, \pm 0.91, \pm 1.06$ at starting concentrations of 4.0, 8.0, 16, 32 µg/L, respectively.							
Results Details	Mean Hc (undimensional) at 4, 8, 16, 32 μg/L starting concentration were 2.96, 3.53, 1.91, 2.98, respectively. Mean recoveries were 82.0, 80.5,							
Results Details Methods	82.9, 79.8% for respective starting concentrations. purge and trap/GC-FID following standard methods 601 and 8010 with modifications for OMCTS							
		EVALUATIO	N .					
Domain	Metric	Rating	Comments					
Domain 1: Substance								
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.					
Metric 2:	Appropriateness	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.						
Domain 2: Test Reliability								
Metric 3:	Reliability/Unbiased (Method Objectivity)	High	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.					
	Reliability/Analytical Method High The analytical method is based EPA guidelines with analytical rest substance.							
Metric 4:								
Metric 4: Domain 3: Other Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.					

Study Citation: Services,, A.A., Inc., (2000). Phase II studies of the Henry's law constant of OMCTS (octamethylcyclotetrasiloxane).

OECD Harmonized

Henry's Law

			EXTRACTIO	ON CONTRACTOR OF THE PROPERTY				
Parameter		Data						
Henry's Law		2.21 - 8.88						
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane						
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported						
Solvent, Reactivity, Storag		Methanol; NR; Refrigerated; 1 year						
Radiolabel, Source, State,	and Purity	No; NR; Liquid; >99.9% (w/w) Notes: OMCTS; lot number DC-1088						
Temperature		20°C						
pН		Not reported						
System		Initial concentration 50 μg/L; air/water ratio was 20/80; equilibration period 24-120 hours						
Standard Deviation Result	S	$\pm 0.79, \pm 0.97, \pm 1.57, \pm 3.51, \pm 1.72$ at 24, 48, 72, 96, 120 hours, respectively.						
Results Details		Mean Hc (undimensional) at 24, 48, 72, 96, 120 hours were 4.60, 5.62, 7.77, 5.04, 3.42, respectively. Mean recoveries were 91.6, 101.9, 88.2,						
Results Details Methods		79.0, 78.6% for respective equilibration time. purge and trap/GC-FID following standard methods 601 and 8010 with modifications for OMCTS						
			EVALUATIO	N .				
Domain		Metric	Rating	Comments				
Domain 1: Substance								
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.				
	Metric 2:	Appropriateness	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.					
Domain 2: Test Reliabi	lity							
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.				
	Metric 4:	Reliability/Analytical Method	The analytical method is based EPA guidelines with analytical methods adjusted for the test substance.					
Domain 3: Other								
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.				

20 degrees.
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OECD Harmonized

Henry's Law

		EXTRACTIO	N.		
Parameter	Data	EATRACTIO	71 3		
Henry's Law	13.83 - 19.41				
CASRN and Test Material	556-67-2; Octamethylcyclotetrasilo	xane			
Confidentiality, Type, and Guideline	None; Experimental; Not reported				
Solvent, Reactivity, Storage, and Stability	methanol; NR; 20°C in the dark; Sta	ible			
Radiolabel, Source, State, and Purity	No; NR; NR; >99.9% (w/w) Notes:	Lot Number DC-1088	3		
Temperature	20°C				
pH	not reported				
System	equal volumes of air/water with OMCTS (40 µg/L) were equilibrated for 96 hours in a circulating water bath.				
Standard Deviation Results	±2.87				
Results Details	Mean of 3 values 17.0; mean recove	ery 89.9±3.7%			
Results Details Methods	purge and trap/GC-FID following standard methods 601 and 8010 with modifications for OMCTS				
		EVALUATIO	ON		
Domain	Metric	Rating	Comments		
Domain 1: Substance					
Metric 1:	Representativeness	High	Data are measured for the subject chemical substance.		
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.		
Domain 2: Test Reliability					
Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific question and the methodology for producing the information is designed to answer a specific question and the methodology for producing the information is designed to answer a specific question and the methodology for producing the information is designed to answer a specific question and the methodology for producing the information is designed to answer a specific question.		

Overall Quali	ty Determ	ination	High	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
	Meure 4:	Kenaomiy/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
	Metric 4:	Reliability/Analytical Method	Цiah	
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
Domain 2: Test Reliabil	•	D-1:-L:1:4-/II-L:J	TT: _1_	
D	1:4			
				other physical/chemical properties or behaviors.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or
	Metric 1:	Representativeness	High	Data are measured for the subject chemical substance.
Domain 1: Substance				

Study Citation: OECD Harmonized	U.S. EPA, (202 Henry's Law	0). Chemistry dashboard information for C	Octamethylcyclo	tetrasiloxane.
Template:	<			
HERO ID:	6982826			
			EXTRACTIO	N
Parameter		Data		
Henry's Law		12.0 atm-m3/mol		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and	Guideline	none; Experimental; Not reported		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Temperature		Not reported		
pН		Not reported		
System		Not reported		
Standard Deviation Results	s	Not reported		
Results Details		Not reported		
Results Details Methods		Not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	tv Determi	nation	High	

^{*} Related References: Physprop

Study Citation:	Xu, S., Kropscott, B. (2012)	. Method for simultaneous determination of	partition coefficients for cy	yclic volatile methy	ylsiloxanes and dimethylsilanediol.
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Analytical Chemistry 84(4):1948-1955. Henry's Law

OECD Harmonized

Template: HERO ID:

2100622

		EXTRACTIO	N		
Parameter	Data				
Henry's Law	Not Reported				
CASRN and Test Material	Not Reported; Dimethylsilanediol				
Confidentiality, Type, and Guideline	None; Experimental; Not reported				
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR	NR; NR; NR; NR			
Radiolabel, Source, State, and Purity	14C-dimethylsilanediol (14C-DMSD): purity	14C-dimethylsilanediol (14C-DMSD): specific activity 522.4 mCi/g; Dow Corning Corporation, Midland, MI, USA; NR; 98% radiochemical purity			
Temperature	20.1°C				
pH	Not reported				
System		Two 100 mL airtight syringes, one with air sampling port and one with water sampling port. The right syringe contained test substance in 1-octar saturated with water and a gas phase, the left syringe contained 1-octanol saturated water and an air phase			
Standard Deviation Results	Not Reported				
Results Details	$log Kaw = -6.84 \pm 0.34$; Air = 1.0E-5 mg				
Results Details Methods	HPLC/RAM and LCS: Air samples pushed through cryogenic cold trap and injected with methanol/acetone, brought to room temperature analysis. Aqueous samples extracted by liquid-liquid extraction with 1-heptanol and DCM, concentrated under a stream of air (extraction eff 92.7%). Aqueous samples mixed with Ultimate Gold XR for LCS, small portion of gas extract also analyzed by LCS.				
		EVALUATIO	N		
Domain	Metric	Rating	Comments		
Domain 1: Substance					
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance's other physical/chemical properties or behaviors.		
Domain 2: Test Reliability					
Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-		
	(Method Objectivity)	-	tion, and the methodology's objective is clear.		
Metric 4:	Reliability/Analytical Method	Medium	The analytical method is non-standard but is expected to be appropriate.		
Domain 3: Other					
	Databases	N/A	Rating of this factor is not applicable to this kind of information.		
Metric 5:	Databases	1 1/1 1	rating of this factor is not approache to this finite of information		

Study Citation:	Xu, S., Kropscott, B. (2012). Method for simultaneous determination of partition coefficients for cyclic volatile methylsiloxanes and dimethylsilanediol.
	Analytical Chemistry 84(4):1948-1955.
OECD Harmonized	Henry's Law

		EXTRACTIO	N		
Parameter	Data				
Henry's Law	Not Reported				
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane				
Confidentiality, Type, and Guideline	None; Experimental; Not reported				
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR				
Radiolabel, Source, State, and Purity	14C-D4: specific activity 393 mCi/g; Dow Corning Corporation, Midland, MI, USA; NR; 98.1% radiochemical purity				
Temperature	21.7°C				
pН	Not reported				
System		Two 100 mL airtight syringes, one with air sampling port and one with water sampling port. The right syringe contained test substance in 1-octanol			
Standard Deviation Results	C 1	e left syringe contain	ned 1-octanol saturated water and an air phase		
Results Details	Not Reported log Kaw = 2.70 ± 0.14 Air = 0.417 mg/LV	Votor - 9 24E 4 ma	·/II		
Results Details Methods		-			
Results Details Methods	HPLC/RAM and LCS: Air samples pushed through cryogenic cold trap and injected with methanol/acetone, brought to room temperanalysis. Aqueous samples extracted by liquid-liquid extraction with 1-heptanol and DCM, concentrated under a stream of air (extraction 92.7%). Aqueous samples mixed with Ultimate Gold XR for LCS, small portion of gas extract also analyzed by LCS.				
		EVALUATIO	N		
F .	Metric	Rating	Comments		
Domain		8	Comments		
		8	Comments		
	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
Domain 1: Substance	Representativeness Appropriateness				
Domain 1: Substance Metric 1: Metric 2:	•	High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance's other physi-		
Domain 1: Substance Metric 1: Metric 2:	•	High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance's other physical/chemical properties or behaviors. The methodology for producing the information is designed to answer a specific ques-		
Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 3:	Appropriateness Reliability/Unbiased (Method Objectivity)	High High High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance's other physical/chemical properties or behaviors.		
Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability	Appropriateness Reliability/Unbiased	High High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance's other physical/chemical properties or behaviors. The methodology for producing the information is designed to answer a specific ques-		
Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 3: Metric 4:	Appropriateness Reliability/Unbiased (Method Objectivity)	High High High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance's other physical/chemical properties or behaviors. The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.		
Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 3: Metric 4:	Appropriateness Reliability/Unbiased (Method Objectivity)	High High High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance's other physical/chemical properties or behaviors. The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.		
Domain 1: Substance Metric 1: Metric 2: Domain 2: Test Reliability Metric 3: Metric 4:	Appropriateness Reliability/Unbiased (Method Objectivity) Reliability/Analytical Method	High High High Medium	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance's other physical/chemical properties or behaviors. The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear. The analytical method is non-standard but is expected to be appropriate.		

Study Citation:	Xu. S., Kropscott, B. (2012)	 Method for simultaneous determination of r 	partition coefficients for cyclic volatile	methylsiloxanes and dimethylsilanediol.

Analytical Chemistry 84(4):1948-1955. Henry's Law

OECD Harmonized

HERO ID: 2	188633			
			EXTRACTIO	N
Parameter		Data		
Henry's Law		Not Reported		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and Guid	eline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, an	d Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and I	Purity	14C-D4: specific activity 393 mCi/g; Do	w Corning Corpor	ation, Midland, MI, USA; NR; 98.1% radiochemical purity
Temperature		21.6°C		
pН		Not reported		
System				d one with water sampling port. The right syringe contained test substance in 1-octanol
			left syringe contai	ined 1-octanol saturated water and an air phase
Standard Deviation Results		Not Reported		_
Results Details		$\log \text{Kaw} = 2.68 \pm 0.12$; Air = 0.741 mg/L		e e e e e e e e e e e e e e e e e e e
Results Details Methods		HPLC/RAM and LCS: Air samples pushed through cryogenic cold trap and injected with methanol/acetone, brought to room temperature be analysis. Aqueous samples extracted by liquid-liquid extraction with 1-heptanol and DCM, concentrated under a stream of air (extraction efficiency). Aqueous samples mixed with Ultimate Gold XR for LCS, small portion of gas extract also analyzed by LCS.		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
N	letric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
M	letric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance's other physical/chemical properties or behaviors.
Domain 2: Test Reliability				
	letric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-
		(Method Objectivity)	_	tion, and the methodology's objective is clear.
N	letric 4:	Reliability/Analytical Method	Medium	The analytical method is non-standard but is expected to be appropriate.
Domain 3: Other				
N	letric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
N	letric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality	Determi	nation	High	

Study Citation:	Xu, S., Kropscott, B. (2014). Evaluation of	f the three-phase equilibrium method for meas	suring temperature dependence of internally consistent partition

coefficients (KOW, KOA, and KAW) for volatile methylsiloxanes and trimethylsilanol. Environmental Toxicology and Chemistry 33(12):2702-2710.

OECD Harmonized

Henry's Law

Template: HERO ID:

HERO ID: 2535012

		EXTRACTIO	N		
Parameter	Data				
Henry's Law	1.79 - 3.09				
CASRN and Test Material	556-67-2; Octamethylcyclotetrasiloxane				
Confidentiality, Type, and Guideline	None; Experimental; Non-guideline				
Solvent, Reactivity, Storage, and Stabili	ty NR; 393 mCi/g; NR; NR	NR; 393 mCi/g; NR; NR			
Radiolabel, Source, State, and Purity	C14; Dow Corning; NR; >98%	C14; Dow Corning; NR; >98%			
Temperature	5.7 ± 0.2 ; 12.2 ± 0.1 ; 34.8 ± 0.2 °C				
pН	Not reported				
System	2 air-tight syringes with an air sampling	port and a water sa	impling port		
Standard Deviation Results	$\pm 0.07, 0.08, 0.13$ and 0.14				
Results Details	$log Kaw = 1.79 \pm 0.07, 2.17 \pm 0.08$ and 3.	09 ± 0.14 at 5.7, 12	2 and 34.8°C, respectively; log Kaw = 2.74 at 25°C based on linear regression analysis		
Results Details Methods	of data. Conc in water: 1.4-2.0, 0.9-1.3, 1.9-4.0 µg/L; test material dissolved in water saturated 1-octanol in one port; 1-octanol saturated water incubated at various temperatures. Double-syringe apparatus; air-tight syringes with sampling ports. Equilibrium reached after 6 hou cold trap, dry ice acetone bath. RP HPLC/RAM; LSC. Radioactivity based concentrations measured as disintegrations/min/mL (DF 3 phases, octanol, water and air, were at equilibrium.				
		EVALUATIO	N		
Domain	Metric	Rating	Comments		
Domain 1: Substance					
	D	High	Data are measured for the subject chemical substance.		
Metric 1	Representativeness		ŷ.		
Metric 1 Metric 2	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups).		
Metric 2	1		Measured data are consistent with the subject chemical substance structural features		
Metric 2	Appropriateness Reliability/Unbiased		Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups). Methodology for producing the information is designed to answer a specific question,		
Metric 2 Domain 2: Test Reliability Metric 3	Appropriateness Reliability/Unbiased (Method Objectivity)	High High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups). Methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.		
Metric 2 Domain 2: Test Reliability	Appropriateness Reliability/Unbiased	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups). Methodology for producing the information is designed to answer a specific question,		
Metric 2 Domain 2: Test Reliability Metric 3 Metric 4	Appropriateness Reliability/Unbiased (Method Objectivity)	High High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups). Methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.		
Metric 2 Domain 2: Test Reliability Metric 3	Appropriateness Reliability/Unbiased (Method Objectivity)	High High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups). Methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.		

tudy Citation: Elsevier, (2019). Reaxys: physical-chemical property data for octamethylcyclotetrasiloxane. CAS Registry Number: 556-67-2 Dielectric Constant				
Emplate: 6984075				
			EXTRACTIO	N
Parameter		Data		
CASRN and Test Material		556-67-2; Octamethylcyclotetrasiloxane		
Confidentiality, Type, and C	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Dielectric Constant		2.4 - 2.405		
Temperature		20°C		
System		NR		
Results Value		Not Reported		
Results Details		Static Dielectric Constant		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Data range determined from multiple primary sources in REAXYS.

Study Citation: OECD Harmonized	Compton, K. L. Other Propertie		oaccumulation of cyc	lic siloxanes in rainbow trout (Oncorhynchus mykiss).
Template:	Other Fropertie	3		
HERO ID:	9960764			
			EXTRACTION	
Parameter		Data		
CASRN and Test Material		556-67-2; D4		
Confidentiality, Type, and	Guideline	No; Not specified; Not reported		
Solvent, Reactivity, Storage	e, and Stability	Not reported; Not reported; Not reported;	Not reported	
Radiolabel, Source, State,	and Purity	Not reported; Not reported; Not reported;	Not reported Notes: No	ot reported
Results Value		log koa		
Results Details		4.29		
Results Remarks		Not Reported		
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	The data reported is consistent with the chemicals physical and chemical properties.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	This metric does not apply to this study type.
Overall Quali	ty Determi	nation	Medium	

^{*} Related References: Citing Xu S, Kropscott B. 2013. Octanol/air partition coefficients of volatile methlysiloxanes and their temperature dependence. J. CHEM. ENG. DATA. 58(1):136-142. (HERO ID 2639742)

Study Citation: OECD Harmonized	SEHSC, (2020). Request for risk evaluation under the Toxic Substances Control Act; Octamethylcyclotetrasiloxane (D4; CASRN: 556-67-2). Miscellaneous							
Template: HERO ID:	7296376	7296376						
			EXTRACTIO	N				
Parameter		Data						
CASRN		556-67-2						
Confidentiality, Type, and	Guideline	none; experimental; Not specified: log K	loa (octanol/air par	tition coefficient)				
Solvent, Reactivity, Storag	•	Not Reported; Not Reported; Not Report	_					
Radiolabel, Source, State,	and Purity	14C-D4; Not Reported; Not Reported; N	lot Reported					
Value		4.22 -						
Temperature		24C						
System		Octanol and air in a gas-tight syringe						
pH		not reported						
Standard Deviation Result	S	-	not reported					
Results Details		HPLC and LSC						
			EVALUATIO	N				
Domain		Metric	Rating	Comments				
Domain 1: Substance								
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.				
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural.				
Domain 2: Test Reliabi	lity							
	Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.				
	Metric 4:	(Method Objectivity) Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods.				
	-	<u> </u>		· · · · · · · · · · · · · · · · · · ·				
Domain 3: Other								
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.				
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.				
Overall Quali	ty Determi	nation	High					

^{*} Related References: Not in Distiller HERO ID: 6987840 (pdf available) Dow Corning Corporation. 2006a. 1-octanol/air partitioning coefficients of octamethylcyclotetrasiloxane (D4), decamethylcyclopentasiloxane (D5), and dodecamethylcyclohexasiloxane (D6) at different temperatures. HES Study No.: 10163–108. Study Director: Xu. (DOWCO06A)

Study Citation:	SEHSC, (2020). Request for risk evaluation under the Toxic Substances Control Act; Octamethylcyclotetrasiloxane (D4; CASRN: 556-67-2).
OECD Harmonized	Miscellaneous
Template:	

			EXTRACTIO	ON
Parameter		Data		
CASRN		556-67-2		
Confidentiality, Type, and	Guideline	none; experimental; Not specified: log Ko	oa (octanol/air par	rtition coefficient)
Solvent, Reactivity, Storag	ge, and Stability	Not Reported; Not Reported; Not Reported	ed; Not Reported	
Radiolabel, Source, State,	and Purity	Not Reported; Not Reported; Not Reported	ed; Not Reported	
Value		4.29 -		
Temperature		21.7C		
System		3-phase equilibrium method		
pН		not reported		
Standard Deviation Result	ts	not reported		
Results Details		not reported		
			EVALUATIO	ON .
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural.
Domain 2: Test Reliabi	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are

Overall Quality Determination High

Models

Metric 6:

N/A

peer-reviewed by experts in the field, are broadly available to the public for review and

use OR includes references to the original sources.

Rating of this factor is not applicable to this kind of information.

^{*} Related References: Source cited HERO ID: 2188633Xu, S., and Kropscott, B. 2012. Method for simultaneous determination of partition coefficients for cyclic volatile methylsiloxanes and dimethylsilanediol. partition properties. Anal. Chem. 84: 1948-1955. (XU12A)Additional source cited: Not in Distiller HERO ID: 6987898 (pdf available) Dow Corning Corporation. 2007d. Simultaneous Determination of Partition Coefficients for Volatile Cyclic Methylsiloxanes. Dow Corning TIS Report 2007-I0000-58104. Study Director: Xu and Kropscott. (DOWCO07F)

Study Citation: Xu, S., Kropscott, B. (2012). Method for simultaneous determination of partition coefficients for cyclic volatile methylsiloxanes and dimethylsilanediol.

Analytical Chemistry 84(4):1948-1955.

OECD Harmonized

Miscellaneous

Template:

HERO ID: 2188633

EX	ľKA	CH	ON	

	LATRICITOR
Parameter	Data
CASRN	Not Reported
Confidentiality, Type, and Guideline	None; Experimental; Based on measured concentrations of the test substance in octanol and air
Solvent, Reactivity, Storage, and Stability	NR; 393 mCi/g; NR; NR
Radiolabel, Source, State, and Purity	C14; Dow Corning; NR; 98.1% Notes: NR
Value	log Koa: 4.28
Temperature	21.7
System	double-syringe apparatus; 2 air-tight syringes with an air sampling port and a water sampling port; concentration in water (mg/L): 1.53e-3; 8.34e-4; dissolved in water saturated 1-octanol in one port; 1-octanol saturated water in other port
pH	NR
Standard Deviation Results	± 0.04
Results Details	equilibrium reached at 20 hours; Sampling details: cryogenic cold trap, dry ice acetone bath; transformation products reported to be silanols

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	e			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties (e.g., if the physical state is described as a liquid, the substance should have a melting point below 25°C and a boiling point above 25°C) or behaviors.
Domain 2: Test Relia	ability			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

PUBLIC RELEASE DRAFT September 2025

Octamethylcyclotetrasiloxane (D4)

Miscellaneous

HERO ID: 2188633 Table: 1 of 3

... continued from previous page

Study Citation: Xu, S., Kropscott, B. (2012). Method for simultaneous determination of partition coefficients for cyclic volatile methylsiloxanes and dimethylsilanediol.

Analytical Chemistry 84(4):1948-1955.

OECD Harmonized Template:

Miscellaneous

HERO ID: 2188633

EVALUATION

Domain Metric Rating Comments

Study Citation:	Xu, S., Kropscott, B. (2012)	. Method for simultaneous	determination of partition coefficie	ents for cyclic volati	ile methylsiloxanes a	and dimethylsilanediol.
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Analytical Chemistry 84(4):1948-1955. Miscellaneous

OECD Harmonized

HERO ID:	2188633

EXTRACTION					
Parameter	Data				
CASRN	Not Reported				
Confidentiality, Type, and Guideline	None; Experimental; Based on measured concentrations of the test substance in octanol and air				
Solvent, Reactivity, Storage, and Stability	NR; Not Reported; NR; NR				
Radiolabel, Source, State, and Purity	C14-dimethylsilanediol; specific activity 522.4 mCi/g; Dow Corning; NR; radiochemical purity 98% Notes: NR				
Value	$\log \text{Koa} = 6.40$				
Temperature	20.1°C				
System	double-syringe apparatus; 2 air-tight syringes with an air sampling port and a water sampling port; concentration in water (mg/L): 1.53e-3; 8.34e-4;				
	dissolved in water saturated 1-octanol in one port; 1-octanol saturated water in other port				
pН	NR				
Standard Deviation Results	± 0.31				
Results Details	equilibrium reached at 20 hours; Sampling details; cryogenic cold trap, dry ice acetone bath				

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties (e.g., if the physical state is described as a liquid, the substance should have a melting point below 25°C and a boiling point above 25°C) or behaviors.
Domain 2: Test Relia	bility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qua	lity Determ	ination	High	

Study Citation:	Xu, S., Kropscott, B. (2012).	Method for simultaneous	determination of partition coefficients	for cyclic volat	ile methylsiloxanes a	nd dimethylsilanediol.

Analytical Chemistry 84(4):1948-1955. Miscellaneous

OECD Harmonized

Tempiate.	
HERO ID:	2188633

EXTRACTION			
Parameter	Data		
CASRN	Not Reported		
Confidentiality, Type, and Guideline	None; Experimental; Based on measured concentrations of the test substance in octanol and air		
Solvent, Reactivity, Storage, and Stability	NR; 393 mCi/g; NR; NR		
Radiolabel, Source, State, and Purity	C14; Dow Corning; NR; 98.1% Notes: NR		
Value	log Koa: 4.30		
Temperature	21.6		
System	double-syringe apparatus; 2 air-tight syringes with an air sampling port and a water sampling port; concentration in water (mg/L): 1.53e-3; 8.34e-4;		
	dissolved in water saturated 1-octanol in one port; 1-octanol saturated water in other port		
pН	NR		
Standard Deviation Results	± 0.02		
Results Details	equilibrium reached at 20 hours; Sampling details: cryogenic cold trap, dry ice acetone bath; transformation products reported to be silanols		

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties (e.g., if the physical state is described as a liquid, the substance should have a melting point below 25°C and a boiling point above 25°C) or behaviors.
Domain 2: Test Reliab	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation:	Xu, S., Kropscott, B. (2014).	Evaluation of the three-phase ed	quilibrium method for measuring	temperature dependence	of internally consistent partition

coefficients (KOW, KOA, and KAW) for volatile methylsiloxanes and trimethylsilanol. Environmental Toxicology and Chemistry 33(12):2702-2710.

OECD Harmonized

Miscellaneous

Template:

HERO ID: 2535012

EXTRACTION

Parameter	Data
CASRN	Not Reported
Confidentiality, Type, and Guideline	None; Experimental; Non-guideline; 3-phase equilibrium method
Solvent, Reactivity, Storage, and Stability	None; 393 mCi/g; NR; NR
Radiolabel, Source, State, and Purity	[C14]D4; Dow Corning; NR; >98% Notes: NR
Value	4.04 - 4.81
Temperature	5.7; 12.2; 21.7; 34.8°C
System	double-syringe apparatus; 2 air-tight syringes with an air sampling port and a water sampling port
pН	NA
Standard Deviation Results	0.02; 0.08; 0.03; 0.07
Results Details	Four log Koa measured = 4.81; 4.53; 4.29; 4.04 Transformation products: silanols; log Koa remained consistent with concentration <0.1 mg/L in 1-octanol; continued increase in total radioactivity attributed to increase concentration of hydrolysis products

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	;			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties (e.g., if the physical state is described as a liquid, the substance should have a melting point below 25°C and a boiling point above 25°C) or behaviors.
Domain 2: Test Relia	bility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Continued on next page ...

Octamethylcyclotetrasiloxane (D4)

... continued from previous page

HERO ID: 2535012 Table: 1 of 1

Study Citation:	Xu, S., Kropscott, B. (2014). Evaluation of the three-phase equilibrium method for measuring temperature dependence of internally consistent partition
	coefficients (KOW, KOA, and KAW) for volatile methylsilovanes and trimethylsilanol. Environmental Toxicology and Chemistry 33(12):2702-2710

OECD Harmonized Template:

ed Miscellaneous

HERO ID: 2535012

EVALUATION

Domain Metric Rating Comments

PUBLIC RELEASE DRAFT September 2025

List of Abbreviations and Acronyms for Data Quality Evaluation and Extraction Tables

ASTM ATSDR AGENCY for Toxic Substances and Disease Registry atm atm m³/mol C C Celsius CASRN Chemical Abstract Service registry number CP Centipoise CRC CHandbook of Chemistry and Physics DOE U.S. Department of Energy ECB ECB European Chemicals Bureau EPA Environmental Protection Agency F F Gas Chromatography g/cm³ Grams per cubic centimeter GLP HLC Henry's Law Constant HPV High Production Volume HSDB Hazard Substance Data Bank ILO International Labour Organization International Programme on Chemical Safety IUCLID International Programme on Chemical Information Database K Kelvin Koa Octanol-Air partition coefficient Mole mmHg Millimeters of Mercury MS Mass Spectrometry N/A Not Applicable NICNAS National Industrial Chemicals Notification and Assessment Scheme NLM National Library of Medicine Not Reported OECD Organisation for Economic Co-operation and Development Pascals (hectopascals; 1 hPa = 100 Pa) Negative base 10 Log of Hydrogen Ion (H+) Concentration in Aqueous Solution Negative base 10 Log of Acid Dissociation Constant (Ka) RIVM National Institute for Public Health and the Environment (Dutch: Rijksinstituut voor Volksgezondheid en Milieu)	Term	Definition
atm atm m³/mol Atmospheres atm · m³/mol C C Celsius CASRN Chemical Abstract Service registry number cP Centipoise CRC CRC Handbook of Chemistry and Physics DOE U.S. Department of Energy ECB European Chemicals Bureau EPA Environmental Protection Agency F Fahrenheit GC Gas Chromatography g/cm³ Grams per cubic centimeter GLP Good Laboratory Practice HLC Henry's Law Constant HPV High Production Volume HSDB Hazard Substance Data Bank ILO International Programme on Chemical Safety IUCLID International Uniform Chemical Information Database K Kelvin Koa Octanol-Air partition coefficient Kow Octanol-Water partition coefficient Mole mmHg Milligrams per Liter mol Mole mmHg Millimeters of Mercury MS Mass Spectrometry N/A Not Applicable NICNAS National Industrial Chemicals Notification and Assessment Scheme NLM National Library of Medicine NR Not Reported OFCD Organisation for Economic Co-operation and Development Pa (hPa) Pascals (hectopascals; 1 hPa = 100 Pa) Negative base 10 Log of Hydrogen Ion (H+) Concentration in Aqueous Solution PKa RIVM National Institute for Public Health and the Environment (Dutch: Ri-	ASTM	American Society for Testing and Materials
atm · m³/mol C C Celsius CASRN Chemical Abstract Service registry number CP Centipoise CRC CRC Handbook of Chemistry and Physics DOE U.S. Department of Energy ECB European Chemicals Bureau EPA Environmental Protection Agency F Fahrenheit GC Gas Chromatography g/cm³ Grams per cubic centimeter GLP HLC Henry's Law Constant HPV High Production Volume HSDB Hazard Substance Data Bank ILO International Labour Organization IPCS International Programme on Chemical Safety IUCLID International Uniform Chemical Information Database K Kelvin Koa Octanol-Air partition coefficient Mole mmHg Millimeters of Mercury MS Moss Spectrometry N/A Not Applicable NICNAS National Industrial Chemicals Notification and Assessment Scheme NLM National Library of Medicine NR Not Applicable NCED Organisation for Economic Co-operation and Development Pascals (hectopascals; 1 hPa = 100 Pa) Negative base 10 Log of Acid Dissociation Constant (Ka) National Institute for Public Health and the Environment (Dutch: Ri-	ATSDR	Agency for Toxic Substances and Disease Registry
CASRN Chemical Abstract Service registry number CP Centipoise CRC CRC Handbook of Chemistry and Physics U.S. Department of Energy ECB European Chemicals Bureau EPA Environmental Protection Agency F Fahrenheit GC Gas Chromatography g/cm³ Grams per cubic centimeter GLP Good Laboratory Practice HLC Henry's Law Constant HPV High Production Volume HSDB Hazard Substance Data Bank ILO International Labour Organization IPCS International Programme on Chemical Safety IUCLID International Uniform Chemical Information Database K Kelvin Koa Octanol-Air partition coefficient Kow Octanol-Water partition coefficient Mole mmHg Milligrams per Liter Mol Mole mmHg Millimeters of Mercury MS Mass Spectrometry N/A Not Applicable NICNAS National Industrial Chemicals Notification and Assessment Scheme NLM National Library of Medicine NR Not Reported OFGD Organisation for Economic Co-operation and Development Pascals (hectopascals; 1 hPa = 100 Pa) Negative base 10 Log of Hydrogen Ion (H+) Concentration in Aqueous Solution PKa RIVM National Institute for Public Health and the Environment (Dutch: Ri-		Atmospheres
CASRN CP CRC CRC Handbook of Chemistry and Physics U.S. Department of Energy ECB European Chemicals Bureau EPA Environmental Protection Agency F F Fahrenheit GC GC Gas Chromatography g/cm³ Grams per cubic centimeter GLP HLC Henry's Law Constant HPV High Production Volume HSDB Hazard Substance Data Bank ILO International Labour Organization IPCS International Programme on Chemical Safety IUCLID International Uniform Chemical Information Database K K Kelvin Koa Octanol-Air partition coefficient Kow Octanol-Water partition coefficient Mole mmHg Millimeters of Mercury MS Mass Spectrometry N/A Not Applicable NICNAS National Industrial Chemicals Notification and Assessment Scheme NLM National Library of Medicine NR Not Reported OFCD Organisation for Economic Co-operation and Development Pa (hPa) Pascals (hectopascals; 1 hPa = 100 Pa) Negative base 10 Log of Hydrogen Ion (H+) Concentration in Aqueous Solution PKa RIVM National Institute for Public Health and the Environment (Dutch: Ri-	atm · m ³ /mol	Atmospheres - cubic meters per mole
cP CRC CRC CRC CRC Handbook of Chemistry and Physics U.S. Department of Energy ECB EUropean Chemicals Bureau EPA Environmental Protection Agency F Fahrenheit GC Gas Chromatography g/cm³ Grams per cubic centimeter GLP Good Laboratory Practice HLC Henry's Law Constant HPV High Production Volume HSDB Hazard Substance Data Bank II.O International Labour Organization IPCS International Uniform Chemical Information Database K Kelvin Koa Octanol-Air partition coefficient Kow Octanol-Water partition coefficient mg/L Milligrams per Liter mol Mole mmHg Millimeters of Mercury MS Mass Spectrometry N/A Not Applicable NICNAS National Industrial Chemicals Notification and Assessment Scheme NLM National Library of Medicine NR Not Reported OECD Organisation for Economic Co-operation and Development Pa (hPa) Pascals (hectopascals; 1 hPa = 100 Pa) Negative base 10 Log of Hydrogen Ion (H+) Concentration in Aque- ous Solution PKa RIVM National Institute for Public Health and the Environment (Dutch: Ri-	C	Celsius
CRC U.S. Department of Energy ECB European Chemicals Bureau EPA Environmental Protection Agency F Fahrenheit GC Gas Chromatography g/cm³ Grams per cubic centimeter GLP Good Laboratory Practice HLC Henry's Law Constant HPV High Production Volume HSDB Hazard Substance Data Bank ILO International Labour Organization IPCS International Programme on Chemical Safety IUCLID International Uniform Chemical Information Database K Kelvin Koa Octanol-Air partition coefficient Kow Octanol-Water partition coefficient Mole mmHg Millimeters of Mercury MS Mass Spectrometry N/A Not Applicable NICNAS National Industrial Chemicals Notification and Assessment Scheme NLM National Library of Medicine NR Not Reported OECD Organisation for Economic Co-operation and Development Pa (hPa) Pascals (hectopascals; 1 hPa = 100 Pa) PKa Negative base 10 Log of Acid Dissociation Constant (Ka) RIVM National Institute for Public Health and the Environment (Dutch: Ri-	CASRN	Chemical Abstract Service registry number
DOE ECB ECB EUropean Chemicals Bureau EPA Environmental Protection Agency F F Fahrenheit GC Gas Chromatography g/cm³ Grams per cubic centimeter GLP GOD Laboratory Practice HLC HENTY'S Law Constant HPV High Production Volume HSDB Hazard Substance Data Bank ILO International Programme on Chemical Safety IUCLID International Uniform Chemical Information Database K Kelvin Koa Octanol-Air partition coefficient Mole mmHg Milligrams per Liter mol Mole mmHg Millimeters of Mercury MS Mass Spectrometry N/A Not Applicable NICNAS National Industrial Chemicals Notification and Assessment Scheme NLM National Library of Medicine NR Not Reported OECD Organisation for Economic Co-operation and Development Pa (hPa) Pa Scals (hectopascals; 1 hPa = 100 Pa) PKa RIVM National Institute for Public Health and the Environment (Dutch: Ri-	cP	Centipoise
ECB European Chemicals Bureau EPA Environmental Protection Agency F Fahrenheit GC Gas Chromatography g/cm³ Grams per cubic centimeter GLP Good Laboratory Practice HLC Henry's Law Constant HPV High Production Volume HSDB Hazard Substance Data Bank ILO International Labour Organization IPCS International Programme on Chemical Safety IUCLID International Uniform Chemical Information Database K Kelvin Koa Octanol-Air partition coefficient Kow Octanol-Water partition coefficient mg/L Milligrams per Liter mol Mole mmHg Millimeters of Mercury MS Mass Spectrometry N/A Not Applicable NICNAS National Industrial Chemicals Notification and Assessment Scheme NLM National Library of Medicine NR Not Reported OECD Organisation for Economic Co-operation and Development Pa (hPa) Pascals (hectopascals; 1 hPa = 100 Pa) PKa Negative base 10 Log of Hydrogen Ion (H+) Concentration in Aqueous Solution PKa RIVM National Institute for Public Health and the Environment (Dutch: Ri-	CRC	CRC Handbook of Chemistry and Physics
EPA F GC Gas Chromatography g/cm³ Grams per cubic centimeter GLP Good Laboratory Practice HLC Henry's Law Constant HPV High Production Volume HSDB Hazard Substance Data Bank ILO International Labour Organization IPCS International Programme on Chemical Safety IUCLID International Uniform Chemical Information Database K Kelvin Koa Octanol-Air partition coefficient Kow Octanol-Water partition coefficient mg/L Milligrams per Liter mol Mole mmHg Millimeters of Mercury MS Mass Spectrometry N/A Not Applicable NICNAS National Industrial Chemicals Notification and Assessment Scheme NLM National Library of Medicine NR OECD Organisation for Economic Co-operation and Development Pa (hPa) Pascals (hectopascals; 1 hPa = 100 Pa) pH Negative base 10 Log of Hydrogen Ion (H+) Concentration in Aqueous Solution pKa RIVM National Institute for Public Health and the Environment (Dutch: Ri-	DOE	U.S. Department of Energy
F GC Gas Chromatography g/cm³ Grams per cubic centimeter GLP Good Laboratory Practice HLC Henry's Law Constant HPV High Production Volume HSDB Hazard Substance Data Bank ILO International Labour Organization IPCS International Programme on Chemical Safety IUCLID International Uniform Chemical Information Database K Kelvin Koa Octanol-Air partition coefficient Kow Octanol-Water partition coefficient mg/L Milligrams per Liter mol Mole mmHg Millimeters of Mercury MS Mass Spectrometry N/A Not Applicable NICNAS National Industrial Chemicals Notification and Assessment Scheme NLM National Library of Medicine NR Not Reported OECD Organisation for Economic Co-operation and Development Pa (hPa) Pascals (hectopascals; 1 hPa = 100 Pa) PH Negative base 10 Log of Hydrogen Ion (H+) Concentration in Aqueous Solution PKa Negative base 10 Log of Acid Dissociation Constant (Ka) RIVM National Institute for Public Health and the Environment (Dutch: Ri-	ECB	European Chemicals Bureau
GC g/cm³ GLP Good Laboratory Practice HLC HHCC Henry's Law Constant HPV High Production Volume HSDB Hazard Substance Data Bank ILO International Labour Organization IPCS International Uniform Chemical Safety IUCLID International Uniform Chemical Information Database K Kelvin Koa Octanol-Air partition coefficient Kow Octanol-Water partition coefficient mg/L mol Mole mmHg Millimeters of Mercury MS N/A Not Applicable NICNAS National Industrial Chemicals Notification and Assessment Scheme NLM National Library of Medicine NR OECD Organisation for Economic Co-operation and Development Pa (hPa) Pascals (hectopascals; 1 hPa = 100 Pa) PKa RIVM National Institute for Public Health and the Environment (Dutch: Ri-	EPA	Environmental Protection Agency
g/cm³ GLP GOOD Laboratory Practice HLC HPV High Production Volume HSDB Hazard Substance Data Bank ILO International Labour Organization IPCS International Uniform Chemical Safety IUCLID International Uniform Chemical Information Database K Kelvin Koa Octanol-Air partition coefficient Kow Octanol-Water partition coefficient mg/L mol Mole mmHg Millimeters of Mercury MS Mass Spectrometry N/A Not Applicable NICNAS NATIONAL NATIONAL NATIONAL NATIONAL NATIONAL NOT REPORTED OF CO Organisation for Economic Co-operation and Development Pa (hPa) Pascals (hectopascals; 1 hPa = 100 Pa) PKa RIVM Negative base 10 Log of Acid Dissociation Constant (Ka) RIVM National Institute for Public Health and the Environment (Dutch: Ri-	F	Fahrenheit
GLP HLC HHC HHC HHC HHOV High Production Volume HSDB Hazard Substance Data Bank ILO International Labour Organization IPCS International Uniform Chemical Safety IUCLID Koa Octanol-Air partition coefficient Kow Octanol-Water partition coefficient Mole mmHg Millimeters of Mercury MS N/A Not Applicable NICNAS NATIONAS N	GC	Gas Chromatography
HLC HPV High Production Volume HSDB Hazard Substance Data Bank ILO International Labour Organization IPCS International Programme on Chemical Safety IUCLID International Uniform Chemical Information Database K Kelvin Koa Octanol-Air partition coefficient Kow Octanol-Water partition coefficient mg/L mol Mole mmHg Milligrams per Liter Mol Millimeters of Mercury MS Mass Spectrometry N/A Not Applicable NICNAS National Industrial Chemicals Notification and Assessment Scheme NLM National Library of Medicine NR OECD Organisation for Economic Co-operation and Development Pa (hPa) Pascals (hectopascals; 1 hPa = 100 Pa) PH Negative base 10 Log of Hydrogen Ion (H+) Concentration in Aqueous Solution PKa RIVM National Institute for Public Health and the Environment (Dutch: Ri-	g/cm ³	Grams per cubic centimeter
HPV HSDB Hazard Substance Data Bank ILO International Labour Organization IPCS International Programme on Chemical Safety IUCLID International Uniform Chemical Information Database K Kelvin Koa Octanol-Air partition coefficient Kow Octanol-Water partition coefficient mg/L mol Mole mmHg Millimeters of Mercury MS Mass Spectrometry N/A Not Applicable NICNAS National Industrial Chemicals Notification and Assessment Scheme NLM National Library of Medicine NR OECD Organisation for Economic Co-operation and Development Pa (hPa) Pascals (hectopascals; 1 hPa = 100 Pa) PH Negative base 10 Log of Hydrogen Ion (H+) Concentration in Aqueous Solution PKa RIVM National Institute for Public Health and the Environment (Dutch: Ri-	GLP	Good Laboratory Practice
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List of Abbreviations and Acronyms for Data Quality Evaluation and Extraction Tables

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Term	Definition
RSC	Royal Society of Chemistry
RT	Retention Time
SIDs	Screening Information Dataset
VP	Vapor Pressure
US or USA	United States of America
UV (UV-Vis)	Ultra Violet (UV-Visible)
WHO	World Health Organization