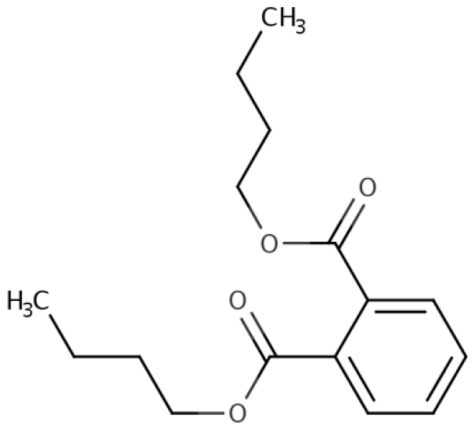
United States
Environmental Protection Agency

May 2025
Office of Chemical Safety and
Pollution Prevention

Data Quality Evaluation and Data Extraction Information for Physical and Chemical Properties for Dibutyl Phthalate (DBP) (1,2-Benzenedicarboxylic acid, 1,2-dibutyl ester)

Systematic Review Support Document for the Draft Risk Evaluation

CASRN: 84-74-2



May 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 Dibutyl Phthalate (DBP)* 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* (referred to hereafter as the '2021 Draft Systematic Review Protocol'). The systematic review steps are further described in the *Draft Systematic Review Protocol for Dibutyl Phthalate (DBP)*. 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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Study Citation:	DOE, (2016). Table 1: Chemicals of concern and associated chemical information. PACs.
OECD Harmonized Template:	Physical Form or State
HERO ID:	3981013

EXTRACTION

Parameter	**Data**
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	none; not specified; not specified
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR
Results Value	liquid
Results Details	not specified

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 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; specific source not reported.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

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

Study Citation:	EC/HC, (1994). Canadian environmental protection act priority substances list assessment report: Dibutyl phthalate.
OECD Harmonized Template:	Physical Form or State
HERO ID:	1333071

EXTRACTION

Parameter	**Data**
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; not specified; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	None; NR; liquid; NR
Results Value	oily liquid
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 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	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	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: Montgomery, J.H. and L.M. Welkom, Groundwater Chemicals Desk Reference, Lewis Publishers Inc., Chelsea, MI (1990).

Study Citation:	ECHA, (2012). Committee for Risk Assessment (RAC) Committee for Socio-economic Analysis (SEAC): Background document to the Opinion on the Annex XV dossier proposing restrictions on four phthalates: Annexes.
OECD Harmonized Template:	Physical Form or State
HERO ID:	7325405

EXTRACTION

Parameter	**Data**
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	none; not specified; not specified
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Results Value	Oily liquid
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 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.
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: Source cited: EU RAR (2004) EU RAR (2004). European Chemicals Bureau (2004). European Union Risk Assessment Report. Dibutyl phthalate, with addendum 2004. Available at: http://esis.jrc.ec.europa.eu/doc/existing-chemicals/risk_assessment/REPORT/dibutylphthalatereport003.pdf

Study Citation:	ECJRC, (2004). Summary Risk Assessment Report: Dibutyl phthalate with addendum to the environment section — 2004.
OECD Harmonized Template:	Physical Form or State
HERO ID:	3661484

EXTRACTION

Parameter	**Data**
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	no; not specified; NA
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; >99% (w/w)
Results Value	oily liquid
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	Reported 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.
Domain 3: Other				
	Metric 5:	Databases	Low	The data are from a primary source without expert peer-review or an unknown secondary source without peer-review and 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 Low

* Related References: specific reference not identified but include: Banerjee and Howard (1984), BASF (corporate data), BUA (1987), Hoyer and Pepperle (1958), Hüls (corporate data); Leyder and Boulanger (1983), Patty (1981)

Study Citation:	NIOSH, (1976). Occupational health guideline for dibutylphthalate.
OECD Harmonized Template:	Physical Form or State
HERO ID:	10182525

EXTRACTION

Parameter	**Data**
CASRN and Test Material	Not Reported; dibutyl phthalate
Confidentiality, Type, and Guideline	No; not specified; NA
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; Liquid; NR Notes: NR
Results Value	Liquid
Results Details	Colorless, oily liquid with a very weak, aromatic odor

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 (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	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

Study Citation:	NIOSH, (2007). NIOSH pocket guide to chemical hazards.
OECD Harmonized Template:	Physical Form or State
HERO ID:	192177

EXTRACTION

Parameter	**Data**
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; Liquid; NR Notes: NR
Results Value	Colorless to faint-yellow; oily liquid; slight, aromatic odor
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 (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	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:	NLM, (2024). PubChem: Hazardous Substance Data Bank: Dibutyl phthalate, 84-74-2.
OECD Harmonized Template:	Physical Form or State
HERO ID:	5926108

EXTRACTION

Parameter	**Data**
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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's physical/chemical properties.
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.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a publicly available and peer-reviewed database.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

* Related References: NIOSH. 2010. NIOSH Pocket Guide to Chemical Hazards. Department of Health & Human Services, Centers for Disease Control & Prevention. National Institute for Occupational Safety & Health. DHHS (NIOSH) Publication No. 2010-168.

Study Citation:	O'Neil, M. J. (2013). Dibutyl phthalate. :550.
OECD Harmonized Template:	Physical Form or State
HERO ID:	5348015

EXTRACTION

Parameter	**Data**
CASRN and Test Material	84-74-2; Dibutyl phthalate
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	oily liquid
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's physical/chemical properties.
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.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a recognized data collection where data are peer-reviewed by experts in the field.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	RSC, (2019). ChemSpider: Dibutyl phthalate.
OECD Harmonized Template:	Physical Form or State
HERO ID:	5926136

EXTRACTION

Parameter	**Data**
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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's physical/chemical properties.
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.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

* Related References: Oxford University Chemical Safety Data

Study Citation:	Rumble, J. R. (2018). Dibutyl phthalate. :3-16.
OECD Harmonized Template:	Physical Form or State
HERO ID:	5348244

EXTRACTION

Parameter	**Data**
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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's physical/chemical properties.
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.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a recognized data collection where data are peer-reviewed by experts in the field.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	Elsevier, (2019). Reaxys: physical-chemical property data for dibutyl phthalate. CAS Registry Number: 84-74-2..
OECD Harmonized Template:	Physical Form or State
HERO ID:	5926413

EXTRACTION

Parameter	**Data**
CASRN and Test Material	84-74-2; Dibutyl phthalate
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	colorless

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)	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 peer-reviewed database that contains 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: Value reported by multiple primary sources in REAXYS.

Study Citation:	Elsevier, (2019). Reaxys: physical-chemical property data for dibutyl phthalate. CAS Registry Number: 84-74-2..
OECD Harmonized Template:	Physical Form or State
HERO ID:	5926413

EXTRACTION

Parameter	**Data**
CASRN and Test Material	84-74-2; Dibutyl phthalate
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	yellow

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)	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 peer-reviewed database that contains 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: Value reported by multiple primary sources in REAXYS.

Study Citation:	Elsevier, (2019). Reaxys: physical-chemical property data for dibutyl phthalate. CAS Registry Number: 84-74-2..
OECD Harmonized Template:	Physical Form or State
HERO ID:	5926413

EXTRACTION

Parameter	**Data**
CASRN and Test Material	84-74-2; Dibutyl phthalate
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	white

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)	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 peer-reviewed database that contains 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: Value reported by multiple primary sources in REAXYS.

Study Citation:	NLM, (2024). PubChem: Hazardous Substance Data Bank: Dibutyl phthalate, 84-74-2.
OECD Harmonized Template:	Physical Form or State
HERO ID:	5926108

EXTRACTION

Parameter	**Data**
CASRN and Test Material	84-74-2; Dibutyl phthalate
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	colorless to faint yellow, oily liquid, slight aromatic odor

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)	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 publicly available and peer-reviewed database.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

* Related References: NIOSH. 2010. NIOSH Pocket Guide to Chemical Hazards. Department of Health & Human Services, Centers for Disease Control & Prevention. National Institute for Occupational Safety & Health. DHHS (NIOSH) Publication No. 2010-168.

Study Citation:	RSC, (2019). ChemSpider: Dibutyl phthalate.
OECD Harmonized Template:	Physical Form or State
HERO ID:	5926136

EXTRACTION

Parameter	**Data**
CASRN and Test Material	84-74-2; Dibutyl phthalate
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	colorless, viscous

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)	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	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 Quality Determination — High

* Related References: Oxford University Chemical Safety Data

Study Citation:	CPSC, (2015). Exposure assessment: Composition, production, and use of phthalates.
OECD Harmonized Template:	Melting Point
HERO ID:	5155508

EXTRACTION

Parameter	**Data**
Melting Point	-65 °C
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; not specified; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Results Details Methods	Not Reported
Standard Deviation Results	Not Reported
Results Details	Not Reported

EVALUATION

Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	The data are measured for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with other 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	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 peer-review.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination Medium

* Related References: CPSC (U.S. Consumer Product Safety Commission). 2010. Review of Exposure Data and Assessments for Selected Dialkyl Ortho-Phthalates. Consumer Product Safety Commission, CPSC-D-06-0006, Bethesda, MD. Available at: http://www.cpsc.gov/pagefiles/126552/pthalexp.pdf.

Study Citation:	DOE, (2016). Table 1: Chemicals of concern and associated chemical information. PACs.
OECD Harmonized Template:	Melting Point
HERO ID:	3981013

EXTRACTION

Parameter	**Data**
Melting Point	-35 - °C
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	none; not specified; none
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR
Results Details Methods	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 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; specific source not reported.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

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

Study Citation:	EC/HC, (2015). State of the science report: Phthalate substance grouping: Medium-chain phthalate esters: Chemical Abstracts Service Registry Numbers: 84-61-7; 84-64-0; 84-69-5; 523-31-9; 5334-09-8;16883-83-3; 27215-22-1; 27987-25-3; 68515-40-2; 71888-89-6.
OECD Harmonized Template:	Melting Point
HERO ID:	3688160

EXTRACTION

Parameter	**Data**
Melting Point	< -70 °C
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; experimental; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Results Details Methods	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 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	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 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 — Medium

* Related References: cites: [ECHA] European Chemicals Agency. c2007–2014a. Registered substances database. Helsinki (FI): ECHA. [cited 2013 July]. Available from: www.echa.europa.eu/information-on-chemicals/registered-substances

Study Citation:	ECHA, (2012). Committee for Risk Assessment (RAC) Committee for Socio-economic Analysis (SEAC): Background document to the Opinion on the Annex XV dossier proposing restrictions on four phthalates: Annexes.
OECD Harmonized Template:	Melting Point
HERO ID:	7325405

EXTRACTION

Parameter	**Data**
Melting Point	-69 °C
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	none; not specified; not specified
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Results Details Methods	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 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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
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: Source cited: EU RAR (2004) EU RAR (2004). European Chemicals Bureau (2004). European Union Risk Assessment Report. Dibutyl phthalate, with addendum 2004. Available at: http://esis.jrc.ec.europa.eu/doc/existing-chemicals/risk_assessment/REPORT/dibutylphthalatereport003.pdf

Study Citation:	ECJRC, (2004). Summary Risk Assessment Report: Dibutyl phthalate with addendum to the environment section — 2004.
OECD Harmonized Template:	Melting Point
HERO ID:	3661484

EXTRACTION

Parameter	**Data**
Melting Point	-69 °C
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; not specified; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; >99% (w/w)
Results Details Methods	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	Reported data are consistent with the subject chemical substance structural features.
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	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: specific reference not identified but include: Banerjee and Howard (1984), BASF (corporate data), BUA (1987), Hoyer and Pepperle (1958), Hüls (corporate data); Leyder and Boulanger (1983), Patty (1981)

Study Citation:	Elsevier, (2019). Reaxys: physical-chemical property data for dibutyl phthalate. CAS Registry Number: 84-74-2..
OECD Harmonized Template:	Melting Point
HERO ID:	5926413

EXTRACTION

Parameter	**Data**
Melting Point	-35 °C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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	Measured conditions were not reported; 5 values were reported in Reaxys; 1 of these value was reported as -35°C; 1 data point was outside the range.
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'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 Determination High

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

Study Citation:	NIOSH, (1976). Occupational health guideline for dibutylphthalate.
OECD Harmonized Template:	Melting Point
HERO ID:	10182525

EXTRACTION

Parameter	**Data**
Melting Point	-37 - °C
CASRN and Test Material	Not Reported; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Not specified; NR
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Results Details Methods	NR
Standard Deviation Results	NR
Results Details	-35 F

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 (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	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

Study Citation:	NIOSH, (2007). NIOSH pocket guide to chemical hazards.
OECD Harmonized Template:	Melting Point
HERO ID:	192177

EXTRACTION

Parameter	**Data**
Melting Point	-31 - F
CASRN and Test Material	84-74-2; Dibutyl phthalate
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 Notes: NR
Results Details Methods	NR
Standard Deviation Results	NR
Results Details	Reported as freezing point

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'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	Medium	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.

Overall Quality Determination High

Study Citation:	NIST, (2022). NIST Chemistry WebBook: Dibutyl phthalate (84-74-2), Standard Reference Database No. 69.
OECD Harmonized Template:	Melting Point
HERO ID:	10225264

EXTRACTION

Parameter	**Data**
Melting Point	238 - K
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; not specified; NA
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Results Details Methods	NR
Standard Deviation Results	NR
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 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	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	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

* Related References: Citing Buckingham, J.; Donaghy, S.M., Dictionary of Organic Compounds: Fifth Edition, Chapman and Hall, New York, 1982, 1.. Similar values reported in Distiller for HERO IDs 679850, 1322045, 5155508, 5348244, 5926108, 5926136, 5926161, 5926413 and 7324826.

Study Citation:	NIST, (2022). NIST Chemistry WebBook: Dibutyl phthalate (84-74-2), Standard Reference Database No. 69.
OECD Harmonized Template:	Melting Point
HERO ID:	10225264

EXTRACTION

Parameter	**Data**
Melting Point	Not Reported
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; not specified; NA
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Results Details Methods	NR
Standard Deviation Results	NR
Results Details	Enthalpy of sublimation at standard conditions = ΔsubH°= 89.54 kJ/mol based on Vapor pressure method

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)	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	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

* Related References: Citing Hickman, K.C.D.; Hecker, J.C.; Embree, N.D., Direct determination of low vapor pressures, Ind. Eng. Chem., 1937, 9, 264-267.

Study Citation:	NLM, (2024). PubChem: Hazardous Substance Data Bank: Dibutyl phthalate, 84-74-2.
OECD Harmonized Template:	Melting Point
HERO ID:	5926108

EXTRACTION

Parameter	**Data**
Melting Point	-35 °C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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 publicly available, peer-reviewed database that provides references to a recognized data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

* Related References: Haynes, W.M. (Ed.) 2014. CRC Handbook of Chemistry and Physics. 95th Edition. CRC Press LLC, Boca Raton: FL 2014. p. 3-156.

Study Citation:	Park, C., Sheehan, R. J. (2000). Phthalic acids and other benzenepolycarboxylic acids. :1-45.
OECD Harmonized Template:	Melting Point
HERO ID:	679796

EXTRACTION

Parameter	**Data**
Melting Point	-40 °C
CASRN and Test Material	84-74-2; dibutyl phthalate
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

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 (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 Quality Determination High

Study Citation:	RSC, (2019). ChemSpider: Dibutyl phthalate.
OECD Harmonized Template:	Melting Point
HERO ID:	5926136

EXTRACTION

Parameter	**Data**
Melting Point	-35 °C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination Medium

* Related References: Biosynth

Study Citation:	Rumble, J. R. (2018). Dibutyl phthalate. :3-16.
OECD Harmonized Template:	Melting Point
HERO ID:	5348244

EXTRACTION

Parameter	**Data**
Melting Point	-35 °C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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 recognized, peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	Saido, K., Kuroki, T., Ikemura, T., Kirisawa, M. (1985). Thermal stability of phthalate esters: Effect of substituents on the β-carbon atom. Journal of Analytical and Applied Pyrolysis 9(1):29-34.
OECD Harmonized Template:	Melting Point
HERO ID:	5576238

EXTRACTION

Parameter	**Data**
Melting Point	Not Reported
CASRN and Test Material	NR; dibutyl phthalate
Confidentiality, Type, and Guideline	No; experimental; thermogravimetry and differential thermal analysis
Solvent, Reactivity, Storage, and Stability	NA; NA; NA; NA
Radiolabel, Source, State, and Purity	NA; commercial source; NR; NR
Results Details Methods	HPLC, IR, NMR and MS used for the identification of the products
Standard Deviation Results	Not Reported
Results Details	Thermogravimetry weight loss with a heating rate of 2 deg C/min of 3% at 141 deg C and 5% at 149 deg C.Thermogravimetry weight loss with a heating rate of 5 deg C/min and nitrogen flow-rate of 15 ml/min of 3% at 160 deg C and 5% at 169 deg C .Differential thermal analysis with a heating rate 10 deg C/min: 205 (initial value) and 214 deg C (max value).

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)	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:	U.S. EPA, (2019). Chemistry Dashboard Information for Dibutyl Phthalate. 84-74-2..
OECD Harmonized Template:	Melting Point
HERO ID:	5926161

EXTRACTION

Parameter	**Data**
Melting Point	-35 °C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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 publicly available database that provides references to the original, peer-reviewed source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination — High

* Related References: PhysProp

Study Citation:	U.S. EPA, (2019). Chemistry Dashboard Information for Dibutyl Phthalate. 84-74-2..
OECD Harmonized Template:	Melting Point
HERO ID:	5926161

EXTRACTION

Parameter	**Data**
Melting Point	-35 °C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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 publicly available database that references a peer-reviewed source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination — High

* Related References: NIOSH

Study Citation:	U.S. EPA, (2019). Chemistry Dashboard Information for Dibutyl Phthalate. 84-74-2..
OECD Harmonized Template:	Melting Point
HERO ID:	5926161

EXTRACTION

Parameter	**Data**
Melting Point	-35 °C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination Medium

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

Study Citation:	U.S. EPA, (2019). Chemistry Dashboard Information for Dibutyl Phthalate. 84-74-2..
OECD Harmonized Template:	Melting Point
HERO ID:	5926161

EXTRACTION

Parameter	**Data**
Melting Point	-35 °C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination Medium

* Related References: Oxford University Chemical Safety Data

Study Citation:	U.S. EPA, (2019). Chemistry Dashboard Information for Dibutyl Phthalate. 84-74-2..
OECD Harmonized Template:	Melting Point
HERO ID:	5926161

EXTRACTION

Parameter	**Data**
Melting Point	-35 °C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination Medium

* Related References: Alfa Aesar

Study Citation:	U.S. EPA, (2019). Chemistry Dashboard Information for Dibutyl Phthalate. 84-74-2..
OECD Harmonized Template:	Melting Point
HERO ID:	5926161

EXTRACTION

Parameter	**Data**
Melting Point	-35 °C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination Medium

* Related References: Alfa Aesar

Study Citation:	Wang, L. M., Richert, R. (2007). Glass transition dynamics and boiling temperatures of molecular liquids and their isomers. Journal of Physical Chemistry B 111(12):3201-3207.
OECD Harmonized Template:	Melting Point
HERO ID:	680451

EXTRACTION

Parameter	**Data**
Melting Point	177.4 K
CASRN and Test Material	84-74-2; Di-n-butyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; Stable in temperature ranges to the glass transition temperature
Radiolabel, Source, State, and Purity	NR; Aldrich; NR; 99%
Results Details Methods	Not Reported
Standard Deviation Results	Not Reported
Results Details	Value is a glass transition temperature.

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's other 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	Medium	The analytical method is non-standard but is expected to be appropriate.
Domain 3: Other				
	Metric 5:	Databases	High	Data are from a peer-reviewed primary source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	DOE, (2016). Table 1: Chemicals of concern and associated chemical information. PACs.
OECD Harmonized Template:	Boiling Point
HERO ID:	3981013

EXTRACTION

Parameter	**Data**
Boiling Point	340 - C
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	none; not specified; not specified
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR
Standard Deviation Results	not reported
Results Details	@ 760 mm Hg

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 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; specific source not reported.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

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

Study Citation:	ECHA, (2012). Committee for Risk Assessment (RAC) Committee for Socio-economic Analysis (SEAC): Background document to the Opinion on the Annex XV dossier proposing restrictions on four phthalates: Annexes.
OECD Harmonized Template:	Boiling Point
HERO ID:	7325405

EXTRACTION

Parameter	**Data**
Boiling Point	340 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	none; not specified; not specified
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Standard Deviation Results	not specified
Results Details	at 1013 hPa

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 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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
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: Source cited: EU RAR (2004) EU RAR (2004). European Chemicals Bureau (2004). European Union Risk Assessment Report. Dibutyl phthalate, with addendum 2004. Available at: http://esis.jrc.ec.europa.eu/doc/existing-chemicals/risk_assessment/REPORT/dibutylphthalatereport003.pdf

Study Citation:	ECJRC, (2004). Summary Risk Assessment Report: Dibutyl phthalate with addendum to the environment section — 2004.
OECD Harmonized Template:	Boiling Point
HERO ID:	3661484

EXTRACTION

Parameter	**Data**
Boiling Point	340 C
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; not specified; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; >99% (w/w)
Standard Deviation Results	Not Reported
Results Details	at 1,013 hPa

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	Reported data are consistent with the subject chemical substance structural features.
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	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: specific reference not identified but include: Banerjee and Howard (1984), BASF (corporate data), BUA (1987), Hoyer and Pepperle (1958), Hüls (corporate data); Leyder and Boulanger (1983), Patty (1981)

Study Citation:	Elsevier, (2019). Reaxys: physical-chemical property data for dibutyl phthalate. CAS Registry Number: 84-74-2..
OECD Harmonized Template:	Boiling Point
HERO ID:	5926413

EXTRACTION

Parameter	**Data**
Boiling Point	340.7 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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	@ 763 torr; 12 values were reported in Reaxys; 1 of these values was reported as 340.7 C at 763 torr; 11 values were outside this range or measured at unreported or non-standard pressures.

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'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 Determination High

⋆ Related References: Data range determined from multiple primary sources in REAXYS.

Study Citation:	NIOSH, (1976). Occupational health guideline for dibutylphthalate.
OECD Harmonized Template:	Boiling Point
HERO ID:	10182525

EXTRACTION

Parameter	Data
Boiling Point	335 - C
CASRN and Test Material	NR; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Not specified; NR
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Standard Deviation Results	NR
Results Details	boiling point measured at 760 mm Hg; 635 F

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 (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	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

Study Citation:	NIOSH, (2007). NIOSH pocket guide to chemical hazards.
OECD Harmonized Template:	Boiling Point
HERO ID:	192177

EXTRACTION

Parameter	**Data**
Boiling Point	644 - F
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; None
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR
Standard Deviation Results	NR
Results Details	at 1 atmosphere

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'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	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:	NIST, (2022). NIST Chemistry WebBook: Dibutyl phthalate (84-74-2), Standard Reference Database No. 69.
OECD Harmonized Template:	Boiling Point
HERO ID:	10225264

EXTRACTION

Parameter	**Data**
Boiling Point	613.2 - K
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; not specified; NR
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Standard Deviation Results	NR
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 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	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	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

* Related References: Citing CRC Handbook of Data on Organic Compounds, 2nd Edition, Weast, R.C and Grasselli, J.G., ed(s)., CRC Press, Inc., Boca Raton, FL, 1989, 1. Similar value reported in Distiller for HERO IDs 679796, 679850, 1322045, 3661424, 3661484, 3688160, 5155508, 5348015, 5926108, 5926161, 7265437, 7324826, 7325405.

Study Citation:	NLM, (2024). PubChem: Hazardous Substance Data Bank: Dibutyl phthalate, 84-74-2.
OECD Harmonized Template:	Boiling Point
HERO ID:	5926108

EXTRACTION

Parameter	**Data**
Boiling Point	340 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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 publicly available, peer-reviewed database that provides references to a recognized data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

* Related References: O'Neil, M.J. (Ed.) 2013. The Merck Index - An Encyclopedia of Chemicals, Drugs, and Biologicals. Whitehouse Station, NJ: Merck and Co., Inc. 2006. p. 550

Study Citation:	O'Neil, M. J. (2013). Dibutyl phthalate. :550.
OECD Harmonized Template:	Boiling Point
HERO ID:	5348015

EXTRACTION

Parameter	**Data**
Boiling Point	340 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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 peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	Park, C., Sheehan, R. J. (2000). Phthalic acids and other benzenepolycarboxylic acids. :1-45.
OECD Harmonized Template:	Boiling Point
HERO ID:	679796

EXTRACTION

Parameter	**Data**
Boiling Point	340 C
CASRN and Test Material	84-74-2; dibutyl phthalate
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 Notes: NR
Standard Deviation Results	NR
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 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	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 Quality Determination High

Study Citation:	RSC, (2019). ChemSpider: Dibutyl phthalate.
OECD Harmonized Template:	Boiling Point
HERO ID:	5926136

EXTRACTION

Parameter	**Data**
Boiling Point	339 - 340 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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	Low	The analytical method is unknown and there is no indication that a reliable method was used
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination Medium

* Related References: Alfa Aesar

Study Citation:	RSC, (2019). ChemSpider: Dibutyl phthalate.
OECD Harmonized Template:	Boiling Point
HERO ID:	5926136

EXTRACTION

Parameter	**Data**
Boiling Point	337 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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	Low	The analytical method is unknown and there is no indication that a reliable method was used
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination Medium

* Related References: Biosynth

Study Citation:	Rumble, J. R. (2018). Dibutyl phthalate. :3-16.
OECD Harmonized Template:	Boiling Point
HERO ID:	5348244

EXTRACTION

Parameter	**Data**
Boiling Point	338 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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 peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	Rumble, J. R. (2018). Flammability of chemical substances. :16-16 - 16-32.
OECD Harmonized Template:	Boiling Point
HERO ID:	6655446

EXTRACTION

Parameter	**Data**
Boiling Point	338
CASRN and Test Material	Not Reported; Dibutyl phthalate
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

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)	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	Data is from a known data-collection, prepared by experts in the field.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination — High

Study Citation:	U.S. EPA, (2019). Chemistry Dashboard Information for Dibutyl Phthalate. 84-74-2..
OECD Harmonized Template:	Boiling Point
HERO ID:	5926161

EXTRACTION

Parameter	**Data**
Boiling Point	340 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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 publicly available database that provides references to the original, peer-reviewed source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

* Related References: PhysProp

Study Citation:	U.S. EPA, (2019). Chemistry Dashboard Information for Dibutyl Phthalate. 84-74-2..
OECD Harmonized Template:	Boiling Point
HERO ID:	5926161

EXTRACTION

Parameter	**Data**
Boiling Point	340 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination Medium

* Related References: Oxford University Chemical Safety Data

Study Citation:	U.S. EPA, (2019). Chemistry Dashboard Information for Dibutyl Phthalate. 84-74-2..
OECD Harmonized Template:	Boiling Point
HERO ID:	5926161

EXTRACTION

Parameter	**Data**
Boiling Point	340 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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 publicly available database that references a peer-reviewed source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination — High

* Related References: NIOSH

Study Citation:	U.S. EPA, (2019). Chemistry Dashboard Information for Dibutyl Phthalate. 84-74-2..
OECD Harmonized Template:	Boiling Point
HERO ID:	5926161

EXTRACTION

Parameter	**Data**
Boiling Point	340 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination Medium

* Related References: Alfa Aesar

Study Citation:	U.S. EPA, (2019). Chemistry Dashboard Information for Dibutyl Phthalate. 84-74-2..
OECD Harmonized Template:	Boiling Point
HERO ID:	5926161

EXTRACTION

Parameter	**Data**
Boiling Point	340 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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

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'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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination Medium

* Related References: Alfa Aesar

Study Citation:	Wang, L. M., Richert, R. (2007). Glass transition dynamics and boiling temperatures of molecular liquids and their isomers. Journal of Physical Chemistry B 111(12):3201-3207.
OECD Harmonized Template:	Boiling Point
HERO ID:	680451

EXTRACTION

Parameter	**Data**
Boiling Point	522 K
CASRN and Test Material	84-74-2; Di-n-butyl phthalate
Confidentiality, Type, and Guideline	None; Calculation; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; Stable in temperature ranges to the glass transition temperature
Radiolabel, Source, State, and Purity	NR; Aldrich; NR; 99%
Standard Deviation Results	Not Reported
Results Details	Boiling point calculated from experimentally derived relationship to measured glass transition temperature Tb = 132 + 2.2Tg (where Tg > 45 K). Tg = 177.4 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	High	Measured data are consistent with the subject chemical substance's other 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	Medium	The analytical method is non-standard but is expected to be appropriate.
Domain 3: Other				
	Metric 5:	Databases	High	Data are from a primary peer-reviewed source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	Cadogan, D., Howick, C. (2000). Plasticizers.
OECD Harmonized Template:	Density
HERO ID:	6311430

EXTRACTION

Parameter	**Data**
Density	1.046 g/cm3
CASRN and Test Material	NA; dibutyl phthalate
Confidentiality, Type, and Guideline	None; not specified; NR
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR
Density Type	density
System	density
Temperature	20 deg C
Standard Deviation Results	NR
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 (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 publicly available, peer-reviewed database that provides references to a peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	DOE, (2016). Table 1: Chemicals of concern and associated chemical information. PACs.
OECD Harmonized Template:	Density
HERO ID:	3981013

EXTRACTION

Parameter	**Data**
Density	1.0465 -
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	none; not specified; not specified
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR
Density Type	specific gravity (density of a substance divided by the density of water)
System	not specified
Temperature	20°C
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 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; specific source not reported.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

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

Study Citation:	ECHA, (2012). Committee for Risk Assessment (RAC) Committee for Socio-economic Analysis (SEAC): Background document to the Opinion on the Annex XV dossier proposing restrictions on four phthalates: Annexes.
OECD Harmonized Template:	Density
HERO ID:	7325405

EXTRACTION

Parameter	**Data**
Density	1.045 g/cm3
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	none; not specified; not specified
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Density Type	relative density
System	not specified
Temperature	20°C
Standard Deviation Results	not specified
Results Details	not specified

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 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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
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: Source cited: EU RAR (2004) EU RAR (2004). European Chemicals Bureau (2004). European Union Risk Assessment Report. Dibutyl phthalate, with addendum 2004. Available at: http://esis.jrc.ec.europa.eu/doc/existing-chemicals/risk_assessment/REPORT/dibutylphthalatereport003.pdf

Study Citation:	ECJRC, (2004). Summary Risk Assessment Report: Dibutyl phthalate with addendum to the environment section — 2004.
OECD Harmonized Template:	Density
HERO ID:	3661484

EXTRACTION

Parameter	**Data**
Density	1.045 g/cm3
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	Not Reported; Not Reported; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; >99% (w/w)
Density Type	relative density
System	Not Reported
Temperature	20°C
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	Reported data are consistent with the subject chemical substance structural features.
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	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: specific reference not identified but include: Banerjee and Howard (1984), BASF (corporate data), BUA (1987), Hoyer and Pepperle (1958), Hüls (corporate data); Leyder and Boulanger (1983), Patty (1981)

Study Citation:	Hammer, E., Lydersen, A. L. (1957). The vapour pressure of di-n-butylphthalate, di-n-butylsebacate, lauric acid and myristic acid. Chemical Engineering Science 7(1-2):66-72.
OECD Harmonized Template:	Density
HERO ID:	5577741

EXTRACTION

Parameter	**Data**
Density	1.0427 - g/cm3
CASRN and Test Material	Not Reported; di-n-butyl phthalate
Confidentiality, Type, and Guideline	No; experimental; NR
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; Test substance was purified by fractional distillation in a vacuum column
Density Type	density
System	NR
Temperature	25°C
Standard Deviation Results	NR
Results Details	values reported in literature: 1.043-1.048

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)	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 data compares well with reported literature values.
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

Study Citation:	NIOSH, (1976). Occupational health guideline for dibutylphthalate.
OECD Harmonized Template:	Density
HERO ID:	10182525

EXTRACTION

Parameter	**Data**
Density	1.05 -
CASRN and Test Material	NR; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; not specified; NR
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
Density Type	Specific gravity
System	NR
Temperature	NR
Standard Deviation Results	Not Reported
Results Details	water = 1

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 (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 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	The metric is not applicable to the study type.

Overall Quality Determination Medium

Study Citation:	NIOSH, (1976). Occupational health guideline for dibutylphthalate.
OECD Harmonized Template:	Density
HERO ID:	10182525

EXTRACTION

Parameter	**Data**
Density	9.6 -
CASRN and Test Material	NR; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; not specified; NR
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
Density Type	vapor density
System	NR
Temperature	NR
Standard Deviation Results	Not Reported
Results Details	air = 1 at boiling point of dibutylphthalate

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 (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 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	The metric is not applicable to the study type.

Overall Quality Determination Medium

Study Citation:	NIOSH, (2007). NIOSH pocket guide to chemical hazards.
OECD Harmonized Template:	Density
HERO ID:	192177

EXTRACTION

Parameter	**Data**
Density	1.05 - Not reported
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; NR
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR
Density Type	Specific gravity
System	Not reported
Temperature	Not Reported
Standard Deviation Results	NR
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 (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	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

Study Citation:	NIOSH, (2019). NIOSH pocket guide to chemical hazards: Dibutyl phthalate.
OECD Harmonized Template:	Density
HERO ID:	8407729

EXTRACTION

Parameter	**Data**
Density	1.05 -
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; not specified; NR
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
Density Type	Specific gravity
System	NR
Temperature	NR
Standard Deviation Results	NR
Results Details	NR

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)	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	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

Study Citation:	OECD, (2016). Report On The Proposal For Classification And Labelling (C&L) Of Dibutyl Phthalate.
OECD Harmonized Template:	Density
HERO ID:	10172655

EXTRACTION

Parameter	**Data**
Density	1.049 - g/cm3
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	No; not specified; NR
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
Density Type	Relative density
System	NR
Temperature	20°C
Standard Deviation Results	NR
Results Details	Guideline ISO EN 3675:1998 pycnometer method reported in ECHA.

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)	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	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: Citing ECHA, 2015. Available at: https://echa.europa.eu/registration-dossier/-/registered-dossier/14862/4/5/?documentUUID=ca897022-1615-4817-972f-dd1c063b364f

Study Citation:	Park, C., Sheehan, R. J. (2000). Phthalic acids and other benzenepolycarboxylic acids. :1-45.
OECD Harmonized Template:	Density
HERO ID:	679796

EXTRACTION

Parameter	**Data**
Density	1.042
CASRN and Test Material	84-74-2; dibutyl phthalate
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 Notes: NR
Density Type	density reported as specific gravity
System	NR
Temperature	25 deg C
Standard Deviation Results	NR
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 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.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	Rumble, J. R. (2018). Dibutyl phthalate. :3-16.
OECD Harmonized Template:	Density
HERO ID:	5348244

EXTRACTION

Parameter	**Data**
Density	1.0465 - g/cm3
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; NR
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR
Density Type	density
System	NR
Temperature	20 deg C
Standard Deviation Results	NR
Results Details	NR

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)	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	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	Data is from a peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	WHO, (1997). Environmental health criteria 189. Di-n-butyl phthalate. ENVIRONMENTAL HEALTH CRITERIA(0):GENEVA.
OECD Harmonized Template:	Density
HERO ID:	1333030

EXTRACTION

Parameter	**Data**
Density	1.047
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; experimental; not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Density Type	density
System	not reported
Temperature	20°C
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 (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	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:	Elsevier, (2019). Reaxys: physical-chemical property data for dibutyl phthalate. CAS Registry Number: 84-74-2..
OECD Harmonized Template:	Density
HERO ID:	5926413

EXTRACTION

Parameter	**Data**
Density	1.0402 - 1.0501 g/cm3
CASRN and Test Material	84-74-2; Dibutyl phthalate
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	20-25°C
Standard Deviation Results	Not Reported
Results Details	@20-25°C; 27 values were reported in Reaxys; 20 values were reported in the range of 1.0402 to 1.0501 at 20-25°C; 7 values were outside this range or measured at unreported or non-standard temperatures.

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)	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: Data range determined from multiple primary sources in REAXYS.

Study Citation:	NLM, (2024). PubChem: Hazardous Substance Data Bank: Dibutyl phthalate, 84-74-2.
OECD Harmonized Template:	Density
HERO ID:	5926108

EXTRACTION

Parameter	**Data**
Density	1.0459 - 1.0465 g/cm3
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
Standard Deviation Results	Not Reported
Results Details	20°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	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	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 publicly available, peer-reviewed database that provides references to a peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

* Related References: O'Neil, M.J. (Ed.) 2013. The Merck Index - An Encyclopedia of Chemicals, Drugs, and Biologicals. Whitehouse Station, NJ: Merck and Co., Inc. 2006. p. 550

Study Citation:	O'Neil, M. J. (2013). Dibutyl phthalate. :550.
OECD Harmonized Template:	Density
HERO ID:	5348015

EXTRACTION

Parameter	**Data**
Density	1.0459 - 1.0465 g/cm3
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
Standard Deviation Results	Not Reported
Results Details	20°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	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	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 recognized, peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination — High

Study Citation:	RSC, (2019). ChemSpider: Dibutyl phthalate.
OECD Harmonized Template:	Density
HERO ID:	5926136

EXTRACTION

Parameter	**Data**
Density	1.045 g/cm3
CASRN and Test Material	84-74-2; Dibutyl phthalate
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	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)	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	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination Medium

* Related References: Alfa Aesar

Study Citation:	Rumble, J. R. (2018). Dibutyl phthalate. :3-16.
OECD Harmonized Template:	Density
HERO ID:	5348244

EXTRACTION

Parameter	**Data**
Density	1.0465 g/cm3
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
Standard Deviation Results	Not Reported
Results Details	20°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	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	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 recognized, peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	NLM, (2024). PubChem: Hazardous Substance Data Bank: Dibutyl phthalate, 84-74-2.
OECD Harmonized Template:	Density
HERO ID:	5926108

EXTRACTION

Parameter	**Data**
Density	9.58
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Not specified
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
System	Not reported
Temperature	Not Reported
Standard Deviation Results	Not Reported
Results Details	air = 1

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's 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	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 publicly available, peer-reviewed database that provides 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

* Related References: Lewis, R.J. Sr. (Ed.) Sax's Dangerous Properties of Industrial Materials. 12th Edition. Wiley-Interscience, Wiley & Sons, Inc. Hoboken, NJ. 2012. p. V3: 1421.

Study Citation:	DOE, (2016). Table 1: Chemicals of concern and associated chemical information. PACs.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	3981013

EXTRACTION

Parameter	**Data**
Vapor Pressure	7.5x10-2 - mm Hg
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	none; not specified; not specified
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR
Temperature	104°C
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	High	Measured data are consistent with the subject chemical substance structural features.
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; specific source not reported.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

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

Study Citation:	EC/HC, (1994). Canadian environmental protection act priority substances list assessment report: Dibutyl phthalate.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	1333071

EXTRACTION

Parameter	**Data**
Vapor Pressure	ca. 0.01 - Pa
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; not specified; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Temperature	25°C
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	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	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	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: CMA (Chemicals Manufacturers Association), "Generation of Environmental Fate and Effects Data Base on 14 Phthalate Esters," Summary Report - Environmental Studies - Phase I, Phthalate Esters Program Panel, Washington, DC (1984).

Study Citation:	ECETOC, (1985). An assessment of the occurrence and effects of dialkyl ortho-phthalates in the environment.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	679967

EXTRACTION

Parameter	**Data**
Vapor Pressure	3.5E-5 mm Hg
CASRN and Test Material	Not Reported; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; experimental; 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	25 deg C
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	High	Measured data are consistent with the subject chemical substance structural features.
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	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: Citing Frissell, W.J.(1956). Volatility of vinyl plastics. Ind. Eng. Chem., 48, 1096.

Study Citation:	ECHA, (2012). Committee for Risk Assessment (RAC) Committee for Socio-economic Analysis (SEAC): Background document to the Opinion on the Annex XV dossier proposing restrictions on four phthalates: Annexes.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	7325405

EXTRACTION

Parameter	**Data**
Vapor Pressure	9.7E-3 Pa
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	none; not specified; not specified
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Temperature	25°C
System	not specified
Standard Deviation Results	±3.3E-3 Pa
Results Details	not specified

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 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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
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: Source cited: EU RAR (2004) EU RAR (2004). European Chemicals Bureau (2004). European Union Risk Assessment Report. Dibutyl phthalate, with addendum 2004. Available at: http://esis.jrc.ec.europa.eu/doc/existing-chemicals/risk_assessment/REPORT/dibutylphthalatereport003.pdf

Study Citation:	ECJRC, (2004). Summary Risk Assessment Report: Dibutyl phthalate with addendum to the environment section — 2004.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	3661484

EXTRACTION

Parameter	**Data**
Vapor Pressure	9.7 x 10-5 hPa
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; not specified; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; >99% (w/w)
Temperature	25°C
System	Not Reported
Standard Deviation Results	±3.3 hPa
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	Reported data are consistent with the subject chemical substance structural features.
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	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: specific reference not identified but include: Banerjee and Howard (1984), BASF (corporate data), BUA (1987), Hoyer and Pepperle (1958), Hüls (corporate data); Leyder and Boulanger (1983), Patty (1981)

Study Citation:	Elsevier, (2019). Reaxys: physical-chemical property data for dibutyl phthalate. CAS Registry Number: 84-74-2..
OECD Harmonized Template:	Vapor Pressure
HERO ID:	5926413

EXTRACTION

Parameter	**Data**
Vapor Pressure	1.2E-4 - 2.5E-4 mm Hg
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
Standard Deviation Results	Not Reported
Results Details	16 data points were reported; 2 of these values were reported in the range of 1.2E-4 to 2.5E-4 torr at standard temperature; 14 data points were outside the range, measured at non-standard or unreported temperatures.

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'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 Determination High

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

Study Citation:	Hamilton, D. J. (1980). Gas chromatographic measurement of volatility of herbicide esters. Journal of Chromatography 195(1):75-83.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	5627459

EXTRACTION

Parameter	**Data**
Vapor Pressure	2.03E-5 mm Hg
CASRN and Test Material	NR; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Calculated; A modified theory for extrapolation to 25°C, an adapted method described by D.J. Jensen and E.D. Schallt, J. Agr. Food Chem., 14(1966) 123.
Solvent, Reactivity, Storage, and Stability	NA; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; Reagent grade
Temperature	25 deg C
System	Hewlett-Packard 5830 with a flame-ionisation detector method used and the retention volumes and vapor pressures for two substances run on a column under the same conditions were determined
Standard Deviation Results	NR
Results Details	Vapor pressure were based on the retention volumes of dibutyl phthalate (73.59-0.124 L) at a range of temperatures (72-182 deg C) from the equation of Small et al. logp° = 7.065-1666/T-547700/T^2. Compared to other equations which calculated the vapor pressure of dibutyl phthalate as 4.44E-5 (Perry and Weber eq.) and 8.68E-6 mm Hg (Hammer and Lydersen eq.).

EVALUATION

Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are calculated 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)	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 (extrapolation of VP using measured physical properties).
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:	Hamilton, D. J. (1980). Gas chromatographic measurement of volatility of herbicide esters. Journal of Chromatography 195(1):75-83.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	5627459

EXTRACTION

Parameter	**Data**
Vapor Pressure	4.31E-3 mm Hg
CASRN and Test Material	NR; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Calculated; A modified theory for extrapolation to 25°C, an adapted method described by D.J. Jensen and E.D. Schallt, J. Agr. Food Chem., 14(1966) 123.
Solvent, Reactivity, Storage, and Stability	NA; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; Reagent grade
Temperature	72 deg C
System	Hewlett-Packard 5830 with a flame-ionisation detector method used and the retention volumes and vapor pressures for two substances run on a column under the same conditions were determined
Standard Deviation Results	NR
Results Details	Vapor pressure were based on the retention volumes of dibutyl phthalate (73.59-0.124 L) at a range of temperatures (72-182 deg C) from the equation of Small et al. logp° = 7.065-1666/T-547700/T^2. Compared to other equations which calculated the vapor pressure of dibutyl phthalate as 4.80E-3 (Perry and Weber eq.) and 2.88E-3 mm Hg (Hammer and Lydersen eq.).

EVALUATION

Domain	Metric		Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are calculated 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)	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 (extrapolation of VP using measured physical properties).
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:	Hamilton, D. J. (1980). Gas chromatographic measurement of volatility of herbicide esters. Journal of Chromatography 195(1):75-83.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	5627459

EXTRACTION

Parameter	**Data**
Vapor Pressure	0.0126 mm Hg
CASRN and Test Material	NR; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Calculated; A modified theory for extrapolation to 25°C, an adapted method described by D.J. Jensen and E.D. Schallt, J. Agr. Food Chem., 14(1966) 123.
Solvent, Reactivity, Storage, and Stability	NA; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; Reagent grade
Temperature	84 deg C
System	Hewlett-Packard 5830 with a flame-ionisation detector method used and the retention volumes and vapor pressures for two substances run on a column under the same conditions were determined
Standard Deviation Results	NR
Results Details	Vapor pressure were based on the retention volumes of dibutyl phthalate (73.59-0.124 L) at a range of temperatures (72-182 deg C) from the equation of Small et al. logp° = 7.065-1666/T-547700/T^2. Compared to other equations which calculated the vapor pressure of dibutyl phthalate as 0.0130 (Perry and Weber eq.) and 9.07E-3 mm Hg (Hammer and Lydersen eq.).

EVALUATION

Domain	Metric		Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are calculated 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)	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 (extrapolation of VP using measured physical properties).
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:	Hamilton, D. J. (1980). Gas chromatographic measurement of volatility of herbicide esters. Journal of Chromatography 195(1):75-83.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	5627459

EXTRACTION

Parameter	**Data**
Vapor Pressure	0.0364 mm Hg
CASRN and Test Material	NR; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Calculated; A modified theory for extrapolation to 25°C, an adapted method described by D.J. Jensen and E.D. Schallt, J. Agr. Food Chem., 14(1966) 123.
Solvent, Reactivity, Storage, and Stability	NA; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; Reagent grade
Temperature	97 deg C
System	Hewlett-Packard 5830 with a flame-ionisation detector method used and the retention volumes and vapor pressures for two substances run on a column under the same conditions were determined
Standard Deviation Results	NR
Results Details	Vapor pressure were based on the retention volumes of dibutyl phthalate (73.59-0.124 L) at a range of temperatures (72-182 deg C) from the equation of Small et al. logp° = 7.065-1666/T-547700/T^2. Compared to other equations which calculated the vapor pressure of dibutyl phthalate as 0.0357 (Perry and Weber eq.) and 0.0280 mm Hg (Hammer and Lydersen eq.).

EVALUATION

Domain	Metric		Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are calculated 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)	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 (extrapolation of VP using measured physical properties).
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:	Hamilton, D. J. (1980). Gas chromatographic measurement of volatility of herbicide esters. Journal of Chromatography 195(1):75-83.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	5627459

EXTRACTION

Parameter	**Data**
Vapor Pressure	0.110 mm Hg
CASRN and Test Material	NR; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Calculated; A modified theory for extrapolation to 25°C, an adapted method described by D.J. Jensen and E.D. Schallt, J. Agr. Food Chem., 14(1966) 123.
Solvent, Reactivity, Storage, and Stability	NA; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; Reagent grade
Temperature	112 deg C
System	Hewlett-Packard 5830 with a flame-ionisation detector method used and the retention volumes and vapor pressures for two substances run on a column under the same conditions were determined
Standard Deviation Results	NR
Results Details	Vapor pressure were based on the retention volumes of dibutyl phthalate (73.59-0.124 L) at a range of temperatures (72-182 deg C) from the equation of Small et al. logp° = 7.065-1666/T-547700/T^2. Compared to other equations which calculated the vapor pressure of dibutyl phthalate as 0.105 (Perry and Weber eq.) and 0.0903 mm Hg (Hammer and Lydersen eq.).

EVALUATION

Domain	Metric		Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are calculated 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)	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 (extrapolation of VP using measured physical properties).
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:	Hamilton, D. J. (1980). Gas chromatographic measurement of volatility of herbicide esters. Journal of Chromatography 195(1):75-83.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	5627459

EXTRACTION

Parameter	**Data**
Vapor Pressure	0.300 mm Hg
CASRN and Test Material	NR; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Calculated; A modified theory for extrapolation to 25°C, an adapted method described by D.J. Jensen and E.D. Schallt, J. Agr. Food Chem., 14(1966) 123.
Solvent, Reactivity, Storage, and Stability	NA; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; Reagent grade
Temperature	127 deg C
System	Hewlett-Packard 5830 with a flame-ionisation detector method used and the retention volumes and vapor pressures for two substances run on a column under the same conditions were determined
Standard Deviation Results	NR
Results Details	Vapor pressure were based on the retention volumes of dibutyl phthalate (73.59-0.124 L) at a range of temperatures (72-182 deg C) from the equation of Small et al. logp° = 7.065-1666/T-547700/T^2. Compared to other equations which calculated the vapor pressure of dibutyl phthalate as 0.285 (Perry and Weber eq.) and 0.258 mm Hg (Hammer and Lydersen eq.).

EVALUATION

Domain	Metric		Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are calculated 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)	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 (extrapolation of VP using measured physical properties).
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:	Hamilton, D. J. (1980). Gas chromatographic measurement of volatility of herbicide esters. Journal of Chromatography 195(1):75-83.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	5627459

EXTRACTION

Parameter	**Data**
Vapor Pressure	0.832 mm Hg
CASRN and Test Material	NR; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Calculated; A modified theory for extrapolation to 25°C, an adapted method described by D.J. Jensen and E.D. Schallt, J. Agr. Food Chem., 14(1966) 123.
Solvent, Reactivity, Storage, and Stability	NA; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; Reagent grade
Temperature	144 deg C
System	Hewlett-Packard 5830 with a flame-ionisation detector method used and the retention volumes and vapor pressures for two substances run on a column under the same conditions were determined
Standard Deviation Results	NR
Results Details	This value was within the region of measurements (not extrapolated).Vapor pressure were based on the retention volumes of dibutyl phthalate (73.59-0.124 L) at a range of temperatures (72-182 deg C) from the equation of Small et al. logp° = 7.065-1666/T-547700/T^2. Compared to other equations which calculated the vapor pressure of dibutyl phthalate as 0.810 (Perry and Weber eq.) and 0.748 mm Hg (Hammer and Lydersen eq.).

EVALUATION

Domain	Metric		Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are calculated 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)	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 (extrapolation of VP using measured physical properties).
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:	Hamilton, D. J. (1980). Gas chromatographic measurement of volatility of herbicide esters. Journal of Chromatography 195(1):75-83.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	5627459

EXTRACTION

Parameter	**Data**
Vapor Pressure	5.726 mm Hg
CASRN and Test Material	NR; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Calculated; A modified theory for extrapolation to 25°C, an adapted method described by D.J. Jensen and E.D. Schallt, J. Agr. Food Chem., 14(1966) 123.
Solvent, Reactivity, Storage, and Stability	NA; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; Reagent grade
Temperature	182 deg C
System	Hewlett-Packard 5830 with a flame-ionisation detector method used and the retention volumes and vapor pressures for two substances run on a column under the same conditions were determined
Standard Deviation Results	NR
Results Details	This value was within the region of measurements (not extrapolated).Vapor pressure were based on the retention volumes of dibutyl phthalate (73.59-0.124 L) at a range of temperatures (72-182 deg C) from the equation of Small et al. logp° = 7.065-1666/T-547700/T^2. Compared to other equations which calculated the vapor pressure of dibutyl phthalate as 6.306 (Perry and Weber eq.) and 5.485 mm Hg (Hammer and Lydersen eq.).

EVALUATION

Domain	Metric		Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are calculated 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)	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 (extrapolation of VP using measured physical properties).
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:	Hamilton, D. J. (1980). Gas chromatographic measurement of volatility of herbicide esters. Journal of Chromatography 195(1):75-83.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	5627459

EXTRACTION

Parameter	**Data**
Vapor Pressure	2.191 mm Hg
CASRN and Test Material	NR; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Calculated; A modified theory for extrapolation to 25°C, an adapted method described by D.J. Jensen and E.D. Schallt, J. Agr. Food Chem., 14(1966) 123.
Solvent, Reactivity, Storage, and Stability	NA; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; Reagent grade
Temperature	162 deg C
System	Hewlett-Packard 5830 with a flame-ionisation detector method used and the retention volumes and vapor pressures for two substances run on a column under the same conditions were determined
Standard Deviation Results	NR
Results Details	This value was within the region of measurements (not extrapolated).Vapor pressure were based on the retention volumes of dibutyl phthalate (73.59-0.124 L) at a range of temperatures (72-182 deg C) from the equation of Small et al. logp° = 7.065-1666/T-547700/T^2. Compared to other equations which calculated the vapor pressure of dibutyl phthalate as 2.239 (Perry and Weber eq.) and 2.041 mm Hg (Hammer and Lydersen eq.).

EVALUATION

Domain	Metric		Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are calculated 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)	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	N/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.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	Hamilton, D. J. (1980). Gas chromatographic measurement of volatility of herbicide esters. Journal of Chromatography 195(1):75-83.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	5627459

EXTRACTION

Parameter	**Data**
Vapor Pressure	Not Reported
CASRN and Test Material	NR; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Calculated; A modified theory for extrapolation to 25°C, an adapted method described by D.J. Jensen and E.D. Schallt, J. Agr. Food Chem., 14(1966) 123.
Solvent, Reactivity, Storage, and Stability	NA; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; Reagent grade
Temperature	25 deg C
System	Hewlett-Packard 5830 with a flame-ionisation detector method used and the retention volumes and vapor pressures for two substances run on a column under the same conditions were determined
Standard Deviation Results	NR
Results Details	Latent heat of vaporization at 25 deg C= 24.4 kcal/mol; based on the equation L = R (3836+2.522E6 T-1). Also reported were L = 21.0, 19.4, 18.2 kcal/mol at 100, 150 and 200 deg C, respectively.

EVALUATION

Domain	Metric		Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are calculated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Rating of this factor is not applicable to this kind of information.
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	Medium	The analytical method is non-standard but is expected to be appropriate (extrapolation of VP using measured physical properties).
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:	Hammer, E., Lydersen, A. L. (1957). The vapour pressure of di-n-butylphthalate, di-n-butylsebacate, lauric acid and myristic acid. Chemical Engineering Science 7(1-2):66-72.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	5577741

EXTRACTION

Parameter	**Data**
Vapor Pressure	0.240 - 13.04 mm Hg
CASRN and Test Material	NR; di-n-butyl phthalate
Confidentiality, Type, and Guideline	No; experimental; vapour-liquid equilibria measurements
Solvent, Reactivity, Storage, and Stability	NA; NR; NA; NA
Radiolabel, Source, State, and Purity	NA; NR; NR; Test substance was purified by fractional distillation in a vacuum column
Temperature	125.70 and 202.05 deg C for 0.240 and 13.27 mm Hg, respectively.
System	low pressure vapour-liquid equilibrium still with McLeod gauge
Standard Deviation Results	NR
Results Details	enthalpy of vaporization = 75.2 to 65.7 kcal/kg at 125.7 and 202.05 deg C, respectivelyadditional vapor pressure data at intermediate temperatures listed

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 (vapor pressure measurements at elevated temperatures).
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	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:	Howard, P. H., Banerjee, S., Robillard, K. H. (1985). Measurement of water solubilities octanol-water partition coefficients and vapor pressures of commercial phthalate esters. Environmental Toxicology and Chemistry 4(5):653-662.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	679985

EXTRACTION

Parameter	**Data**
Vapor Pressure	9.7E-3 Pa
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; If more than one manufacturer produced the individual PAE, the PAE product provided to us was an equal-proportion blend.
Radiolabel, Source, State, and Purity	NR; Provided to Chemical Manufacturers' Association by U.S. manufacturers.; NR; Each sample contained less than 1 % of non-PAE material, as determined by another laboratory. Notes: single isomer
Temperature	25°C
System	Measured by the gas saturation method: U.S. Environmental Protection Agency. 1980. Environmental test standards: Proposed rules. Vapor pressure. Fed. Reg. 45:77345-77350.
Standard Deviation Results	3.3E-3
Results Details	Not Reported

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 (e.g., presence of certain functional groups) and other physical/chemical properties.
Domain 2: Test Reliability				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	Peer-reviewed journal article with results compared to other literature values.
	Metric 4:	Reliability/Analytical Method	High	Standard method used.
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

Study Citation:	Ishak, H., Stephan, J., Karam, R., Goutaudier, C., Mokbel, I., Saliba, C., Saab, J. (2016). Aqueous solubility, vapor pressure and octanol-water partition coefficient of two phthalate isomers dibutyl phthalate and di-isobutyl phthalate contaminants of recycled food packages. Fluid Phase Equilibria 427:362-370.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	3475635

EXTRACTION

Parameter	**Data**
Vapor Pressure	0.0047 Pa
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; Sigma-Aldrich; NR; 99% Notes: Used without further purification
Temperature	298.15 K
System	System uses dynamic gas saturation method between 313.15 and 423.15K, using the Clausius-Clapeyron equation to fit to standard temperature (298.15 K).
Standard Deviation Results	Not Reported
Results Details	Value is extrapolated from vapor pressures measured between 313.15 K and 423.15 K.

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 (e.g., presence of certain functional groups).
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	Medium	The analytical method is non-standard but is expected to be appropriate.
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

Study Citation:	Lu, C. (2009). Prediction of environmental properties in water-soil-air systems for phthalates. Bulletin of Environmental Contamination and Toxicology 83(2):168-173.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	807140

EXTRACTION

Parameter	**Data**
Vapor Pressure	5.16X10-3 Pa
CASRN and Test Material	84-74-2; di-n-butyl phthalate
Confidentiality, Type, and Guideline	none; QSAR; Quantitative Structure-Property relationship model for estimation of solubility in air
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: DBP
Temperature	Not Reported
System	Predictive model developed using gas law: S(A) = P(liquid substance)/RT where R= gas constant (8.314 Pa m-3 mol-1 K-1) and T = absolute temperature (298K); Log S(A) = -0.2324 - 0.3215 (Lu)
Standard Deviation Results	Not Reported
Results Details	Log S(A): n = 15; correlation coefficient (R) = 0.9461; standard error (SE) = 0.27; leave-one-out cross validation correlation coefficient (Rsv) = 0.9218; corresponding standard errors (scv) = 0.34

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)	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	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	High	The model had a defined, unambiguous endpoint AND the model performance was known and r2 $>$ 0.7, q2 $>$ 0.5, and SE $<$ 0.3 (ECHA, 2016).

Overall Quality Determination High

Study Citation:	NIOSH, (1976). Occupational health guideline for dibutylphthalate.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	10182525

EXTRACTION

Parameter	Data
Vapor Pressure	< 0.01 - mm Hg
CASRN and Test Material	NR; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; not specified; NR
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	20°C
System	NR
Standard Deviation Results	NR
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 or other physical/chemical properties or behaviors.
Domain 2: Test Reliability				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Low	It is unclear if this is a cut-off value or a measured/estimated value.
	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 Low

Study Citation:	NIOSH, (2007). NIOSH pocket guide to chemical hazards.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	192177

EXTRACTION

Parameter	**Data**
Vapor Pressure	0.00007 - mm Hg
CASRN and Test Material	84-74-2; Dibutyl phthalate
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 Notes: NR
Temperature	NR
System	NR
Standard Deviation Results	NR
Results Details	Not Reported

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 (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	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:	NIOSH, (2019). NIOSH pocket guide to chemical hazards: Dibutyl phthalate.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	8407729

EXTRACTION

Parameter	**Data**
Vapor Pressure	0.00007 - mm Hg
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; not specified; NR
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	NR
System	NR
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 (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	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

Study Citation:	NIST, (2022). NIST Chemistry WebBook: Dibutyl phthalate (84-74-2), Standard Reference Database No. 69.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	10225264

EXTRACTION

Parameter	**Data**
Vapor Pressure	Not Reported
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Not specified; Vapor pressure method
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	300 K
System	Not Reported
Standard Deviation Results	±4.6
Results Details	Enthalpy of vaporization = ΔvapH° = 91.7 kJ/mol. Based on data from 288. - 313. 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 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.
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: Citing Birks, J.; Bradley, R.S., The rate of evaporation of droplets. II. The influence of changes of temperature and of the surrounding gas on the rate of evaporation of drops of di-n-butyl phthalate, Proc. Roy. Soc. London A, 1949, 198, 226-239.

Study Citation:	NIST, (2022). NIST Chemistry WebBook: Dibutyl phthalate (84-74-2), Standard Reference Database No. 69.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	10225264

EXTRACTION

Parameter	**Data**
Vapor Pressure	Not Reported
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Not specified; NR
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	462 K
System	Not Reported
Standard Deviation Results	NR
Results Details	Enthalpy of vaporization = ΔvapH° = 80.4 kJ/mol

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)	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.

Overall Quality Determination High

* Related References: Citing Katayama, Hirotake, Vapor pressures of diethyl, diisopropyl, and dibutyl phthalates at reduced pressures., Bull. Chem. Soc. Jpn., 1988, 61, 9, 3326-3328, https://doi.org/10.1246/bcsj.61.3326 .

Study Citation:	NIST, (2022). NIST Chemistry WebBook: Dibutyl phthalate (84-74-2), Standard Reference Database No. 69.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	10225264

EXTRACTION

Parameter	**Data**
Vapor Pressure	Not Reported
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Calculation; Calculated from the vapor pressure data reported by the method of least squares
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	329 K
System	Not Reported
Standard Deviation Results	NR
Results Details	Enthalpy of vaporization = ΔvapH° = 94.0 kJ/mol. Based on data from 314 - 469 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 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.
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: Citing Stephenson, Richard M.; Malanowski, Stanislaw, Handbook of the Thermodynamics of Organic Compounds, 1987, https://doi.org/10.1007/978-94-009-3173-2.

Study Citation:	NIST, (2022). NIST Chemistry WebBook: Dibutyl phthalate (84-74-2), Standard Reference Database No. 69.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	10225264

EXTRACTION

Parameter	**Data**
Vapor Pressure	Not Reported
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Calculation; Calculated from the vapor pressure data reported by the method of least squares
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	483 K
System	Not Reported
Standard Deviation Results	NR
Results Details	Enthalpy of vaporization = ΔvapH° = 76.1 kJ/mol. Based on data from 468 - 605 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 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.
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: Citing Stephenson, Richard M.; Malanowski, Stanislaw, Handbook of the Thermodynamics of Organic Compounds, 1987, https://doi.org/10.1007/978-94-009-3173-2.

Study Citation:	NLM, (2024). PubChem: Hazardous Substance Data Bank: Dibutyl phthalate, 84-74-2.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	5926108

EXTRACTION

Parameter	**Data**
Vapor Pressure	2.01E-5 mm Hg
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
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'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 publicly available, peer-reviewed database that provides 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

* Related References: Donovan, S.F. 1996. J Chromatogr A. 749: 123-129.

Study Citation:	RSC, (2019). ChemSpider: Dibutyl phthalate.
OECD Harmonized Template:	Vapor Pressure
HERO ID:	5926136

EXTRACTION

Parameter	**Data**
Vapor Pressure	0.0001 mm Hg
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
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'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	Low	Vapor pressure value is no longer the most up to date value contained in the NIOSH reference cited.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination Low

* Related References: NIOSH

Study Citation:	U.S. EPA, (2019). Chemistry Dashboard Information for Dibutyl Phthalate. 84-74-2..
OECD Harmonized Template:	Vapor Pressure
HERO ID:	5926161

EXTRACTION

Parameter	**Data**
Vapor Pressure	2.01E-5 mm Hg
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
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'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 publicly available database that provides 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

* Related References: PhysProp. Donovan, SF 1996

Study Citation:	EC/HC, (1994). Canadian environmental protection act priority substances list assessment report: Dibutyl phthalate.
OECD Harmonized Template:	logKow
HERO ID:	1333071

EXTRACTION

Parameter	**Data**
log k_{ow}	4.31 - 4.79
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; not specified; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Temperature	Not Reported
System	Not Reported
pH	Not Reported
Results Details Method	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 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	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	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: Montgomery, J.H. and L.M. Welkom, Groundwater Chemicals Desk Reference, Lewis Publishers Inc., Chelsea, MI (1990).

Study Citation:	EC/HC, (2017). Draft screening assessment: Phthalate substance grouping.
OECD Harmonized Template:	logKow
HERO ID:	5353181

EXTRACTION

Parameter	**Data**
log k_{ow}	4.46
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	none; experimental; not specified
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Temperature	not specified
System	not specified
pH	not specified
Results Details Method	not specified
Standard Deviation Results	not specified
Results Details	not specified

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 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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
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: Source cited: ECHA c2007-2015b

Study Citation:	ECHA, (2012). Committee for Risk Assessment (RAC) Committee for Socio-economic Analysis (SEAC): Background document to the Opinion on the Annex XV dossier proposing restrictions on four phthalates: Annexes.
OECD Harmonized Template:	logKow
HERO ID:	7325405

EXTRACTION

Parameter	**Data**
log k_{ow}	4.57
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	none; not specified; not specified
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Temperature	not specified
System	not specified
pH	not specified
Results Details Method	not specified
Standard Deviation Results	not specified
Results Details	not specified

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 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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
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: Source cited: EU RAR (2004) EU RAR (2004). European Chemicals Bureau (2004). European Union Risk Assessment Report. Dibutyl phthalate, with addendum 2004. Available at: http://esis.jrc.ec.europa.eu/doc/existing-chemicals/risk_assessment/REPORT/dibutylphthalatereport003.pdf

Study Citation:	ECJRC, (2004). Summary Risk Assessment Report: Dibutyl phthalate with addendum to the environment section — 2004.
OECD Harmonized Template:	logKow
HERO ID:	3661484

EXTRACTION

Parameter	**Data**
log k_{ow}	4.57
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; not specified; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; >99% (w/w)
Temperature	Not Reported
System	Not Reported
pH	Not Reported
Results Details Method	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	Reported data are consistent with the subject chemical substance structural features.
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	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: specific reference not identified but include: Banerjee and Howard (1984), BASF (corporate data), BUA (1987), Hoyer and Pepperle (1958), Hüls (corporate data); Leyder and Boulanger (1983), Patty (1981)

Study Citation:	Elsevier, (2019). Reaxys: physical-chemical property data for dibutyl phthalate. CAS Registry Number: 84-74-2..
OECD Harmonized Template:	logKow
HERO ID:	5926413

EXTRACTION

Parameter	**Data**
log k_{ow}	4.5 - 4.63
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
pH	Not Reported
Results Details Method	Not Reported
Standard Deviation Results	Not Reported
Results Details	@ 25 C; 6 data points were reported; 3 of these values were reported in the range of 4.5-4.63 at standard temperature; 3 data points were outside the range or measured at non-standard temperatures.

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'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 Determination High

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

Study Citation:	Howard, P. H., Banerjee, S., Robillard, K. H. (1985). Measurement of water solubilities octanol-water partition coefficients and vapor pressures of commercial phthalate esters. Environmental Toxicology and Chemistry 4(5):653-662.
OECD Harmonized Template:	logKow
HERO ID:	679985

EXTRACTION

Parameter	Data
log k_{ow}	3.74
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; If more than one manufacturer produced the individual PAE, the PAE product provided to us was an equal-proportion blend.
Radiolabel, Source, State, and Purity	NR; Provided to Chemical Manufacturers' Association by U.S. manufacturers.; NR; Each sample contained less than 1 % of non-PAE material, as determined by another laboratory. Notes: single isomer
Temperature	Not reported
System	HPLC method from a draft ASTM standard practice: Swann, R.L., D.A. Laskowski, P.J. McCall, K. Vander Kuy and H.J. Dishburger. 1983. Residue Rev. 85:17-28.
pH	Not reported
Results Details Method	The standards were benzene (log KOW=2.13), bromobenzene (log KOW = 2.99), biphenyl (log KO, = 3.76), bibenzyl (log KOW = 4.81), p,p-DDE (log KOW = 5.69), 2,4,5,2',5'-pentachlorobiphenyl (log KOW = 6.11) and 2,4,5,2',4',5'-hexachlorobiphenyl (log KOW = 6.72).
Standard Deviation Results	0.006
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 (e.g., presence of certain functional groups) and other 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	Medium	The analytical method is non-standard but is expected to be appropriate.
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

Study Citation:	Howard, P. H., Banerjee, S., Robillard, K. H. (1985). Measurement of water solubilities octanol-water partition coefficients and vapor pressures of commercial phthalate esters. Environmental Toxicology and Chemistry 4(5):653-662.
OECD Harmonized Template:	logKow
HERO ID:	679985

EXTRACTION

Parameter	**Data**
log k_{ow}	4.79
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; partition method
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; If more than one manufacturer produced the individual PAE, the PAE product provided to us was an equal-proportion blend.
Radiolabel, Source, State, and Purity	NR; Provided to Chemical Manufacturers' Association by U.S. manufacturers.; NR; Each sample contained less than 1 % of non-PAE material, as determined by another laboratory. Notes: single isomer
Temperature	Not reported
System	Partition method
pH	Not reported
Results Details Method	Not Reported
Standard Deviation Results	0.234
Results Details	Value is for the mean of six determinations, three at 0.01 M and three at 0.1 M; the latter is not a recommended concentration. The DBP log Kow, for the mean of the three determinations at 0.01 M (4.59) is considerably closer to the other literature values than the mean at 0.1 M (4.99), which may suggest the importance of working with the recommended concentration range.

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) and other physical/chemical properties.
Domain 2: Test Reliability				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	Standard method; result is consistent with literature values.
	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 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

Study Citation:	Ishak, H., Stephan, J., Karam, R., Goutaudier, C., Mokbel, I., Saliba, C., Saab, J. (2016). Aqueous solubility, vapor pressure and octanol-water partition coefficient of two phthalate isomers dibutyl phthalate and di-isobutyl phthalate contaminants of recycled food packages. Fluid Phase Equilibria 427:362-370.
OECD Harmonized Template:	logKow
HERO ID:	3475635

EXTRACTION

Parameter	**Data**
log k_{ow}	4.53
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; Sigma-Aldrich; NR; 99% Notes: Used without further purification
Temperature	298.15 K
System	Shake-flask method with n-octanol and purified water, quantified by HPLC-UV.
pH	Not reported
Results Details Method	n-Octanol pre-saturated water with the test substance is poured into a test vessel and stirred with a magnetic stirring bar. 100 g of the aqueous phase is analyzed through C-18 cartridges and eluted with methanol. The concentration of the solute is then quantified by HPLC-UV.
Standard Deviation Results	0.092
Results Details	Value the average of 3 replicates at atmospheric pressure.

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.
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. Methodology reported in J. Saab, G. Basil, R. About Niccol, J. Stephan, I. Mokbel, J. Jose, Chemosphere 82 (2011) 929-934.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is non-standard but is expected to be appropriate.
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

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Study Citation:	Ishak, H., Stephan, J., Karam, R., Goutaudier, C., Mokbel, I., Saliba, C., Saab, J. (2016). Aqueous solubility, vapor pressure and octanol-water partition coefficient of two phthalate isomers dibutyl phthalate and di-isobutyl phthalate contaminants of recycled food packages. Fluid Phase Equilibria 427:362-370.
OECD Harmonized Template:	logKow
HERO ID:	3475635

EVALUATION

Domain	Metric	Rating	Comments

Study Citation:	Lu, C. (2009). Prediction of environmental properties in water-soil-air systems for phthalates. Bulletin of Environmental Contamination and Toxicology 83(2):168-173.
OECD Harmonized Template:	logKow
HERO ID:	807140

EXTRACTION

Parameter	Data
log k_{ow}	4.22
CASRN and Test Material	84-74-2; di-n-butyl phthalate
Confidentiality, Type, and Guideline	none; QSAR; Quantitative Structure-Property relationship model for estimation of log Kow
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: DBP
Temperature	not applicable
System	QSPR model using the Lu index, which is based on the shortest distance matrix.
pH	not applicable
Results Details Method	Predictive model developed using Lu index: Log Kow = -4.7875 + 0.5315 (Lu)
Standard Deviation Results	Not Reported
Results Details	n = 15; correlation coefficient (R) = 0.9836; standard error (SE) = 0.40; leave-one-out cross validation correlation coefficient (Rsv) = 0.9784; corresponding standarderrors (scv) = 0.47

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)	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	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	Uninformative	The QSPR model failed the standard error threshold of <0.3 and is therefore rated unacceptable.

Overall Quality Determination — Medium

Study Citation:	Mueller, M., Klein, W. (1992). Comparative evaluation of methods predicting water solubility for organic compounds. Chemosphere 25(6):769-782.
OECD Harmonized Template:	logKow
HERO ID:	654554

EXTRACTION

Parameter	**Data**
log k_{ow}	4.69
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Calculation; 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
pH	Not reported
Results Details Method	Not reported
Standard Deviation Results	Not reported
Results Details	calculated Pow-values -MedChem-Software 1989

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	Medium	Calculated data 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	N/A	This matrix is not applicable to this calculated data.
Domain 3: Other				
	Metric 5:	Databases	N/A	This matrix is not applicable to this calculated data.
	Metric 6:	Models	High	The model had a defined, unambiguous endpoint and the model performance was known.

Overall Quality Determination High

Study Citation:	NLM, (2024). PubChem: Hazardous Substance Data Bank: Dibutyl phthalate, 84-74-2.
OECD Harmonized Template:	logKow
HERO ID:	5926108

EXTRACTION

Parameter	**Data**
log k_{ow}	4.5
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
pH	Not Reported
Results Details Method	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'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 publicly available database that provides references to a peer-reviewed source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

* Related References: Ellington, J.J., Floyd, T.L.. 1996. Octanol/water partition coefficients for eight phthalate esters. EPA/600/S-96/006. Sept 1996. Athens, GA: U.S. Environ Prot Agency, National Exposure Research Lab.

Study Citation:	SRC, (1984). Final report measurement of octanol-water partition coefficients of phthalate esters.
OECD Harmonized Template:	logKow
HERO ID:	1316207

EXTRACTION

Parameter	**Data**
log k_{ow}	4.79 -
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	No; experimental; Equilibrium method
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Reported; Not Reported
Radiolabel, Source, State, and Purity	Not Reported; US Manufacturers; Not Reported; Not Reported Notes: analyzed to be within commercial specification limits
Temperature	25ºC
System	Test substance in equal parts octanol and water shook in a centrifuge tube and kept at a constant temperature for 1 hour. The tubes were centrifuged at the end of the hour.
pH	Not reported
Results Details Method	HPLC
Standard Deviation Results	0.094
Results Details	Also reported as kow = 69000±14700; 39000±17300 at 10^-2M and 99000±12700 at 10^-1M

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 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	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

* Related References: Entered into ECHA as 2 (reliable with restrictions)

Study Citation:	SRC, (1984). Final report measurement of octanol-water partition coefficients of phthalate esters.
OECD Harmonized Template:	logKow
HERO ID:	1316207

EXTRACTION

Parameter	**Data**
log k_{ow}	3.74 -
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	No; experimental; HPLC method
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Reported; Not Reported
Radiolabel, Source, State, and Purity	Not Reported; US Manufacturers; Not Reported; Not Reported Notes: analyzed to be within commercial specification limits
Temperature	25ºC
System	partition coefficient correlated to HPLC retention time
pH	Not reported
Results Details Method	HPLC
Standard Deviation Results	0.003
Results Details	Value reported is within the range of the values reported by the OECD for their partitioning method.

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	Value is within the range reported by the OECD.
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	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 Quality Determination — High

Study Citation:	U.S. EPA, (2015). Update of Human Health Ambient Water Quality Criteria: Di-n-butyl Phthalate (CASRN 84-74-2).
OECD Harmonized Template:	logKow
HERO ID:	10141842

EXTRACTION

Parameter	**Data**
log k_{ow}	3.7 - 4.72
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	none; not specified; 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	not reported
System	not reported
pH	not reported
Results Details Method	not reported
Standard Deviation Results	not reported
Results Details	4.21 average value; the cited HERO ID 5160123 reports the values as: 4.72 (Hansch et al. 1995), 4.45 (Staples et al. 1997) and 3.7 (de Bruijn et al. 1989)

EVALUATION

Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are for the subject chemical substance.
	Metric 2:	Appropriateness	High	Data are consistent with the subject chemical substance structural features.
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	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: Citing ATSDR 2001 HERO ID 5160123; not in distiller at time of extraction.

Study Citation:	U.S. EPA, (2019). Chemistry Dashboard Information for Dibutyl Phthalate. 84-74-2..
OECD Harmonized Template:	logKow
HERO ID:	5926161

EXTRACTION

Parameter	**Data**
log k_{ow}	4.5
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
pH	Not Reported
Results Details Method	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'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 publicly available database that references peer-reviewed 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: PhysProp. Ellington, JJ and Floyd, TL. 1996

Study Citation:	Verbruggen, E. M., Klamer, C., H.J., Villerius, L., Brinkman, T., U.A., Hermens, J. L. (1999). Gradient elution reversed-phase high-performance liquid chromatography for fractionation of complex mixtures of organic micropollutants according to hydrophobicity using isocratic retention parameters. Journal of Chromatography A 835(1-2):19-27.
OECD Harmonized Template:	logKow
HERO ID:	1333747

EXTRACTION

Parameter	**Data**
log k_{ow}	4.25
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Not Reported
Solvent, Reactivity, Storage, and Stability	Pure methanol; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; Fluka, Aldrich-Chemie, Riedel-de Haen, Merck, Shell Nederland Chemie, J.T. Baker or Accu Standards; Liquid; High purity Notes: Analyte measured at concentrations of 0.5-5 mM/200 µL total volume in methanol
Temperature	22 ± 0.2°C
System	Retention times measured with a solvent delivery system and UV detector operated at 254 nm. A C18-bonded silica column and guard column were used for retention. The eluent was a solution of HPLC-grade methanol and MilliQ water.
pH	Not reported
Results Details Method	Gradient elution RP-HPLC.
Standard Deviation Results	Not Reported
Results Details	Calculated from experimental retention times.

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.
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	Medium	The analytical method is non-standard but is expected to be appropriate.
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

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Study Citation:	Verbruggen, E. M., Klamer, C., H.J., Villerius, L., Brinkman, T., U.A., Hermens, J. L. (1999). Gradient elution reversed-phase high-performance liquid chromatography for fractionation of complex mixtures of organic micropollutants according to hydrophobicity using isocratic retention parameters. Journal of Chromatography A 835(1-2):19-27.
OECD Harmonized Template:	logKow
HERO ID:	1333747

EVALUATION

Domain	Metric	Rating	Comments

Study Citation:	Defoe, D. L., Holcombe, G. W., Hammermeister, D. E., Biesinger, K. E. (1990). Solubility and toxicity of eight phthalate esters to four aquatic organisms. Environmental Toxicology and Chemistry 9(5):623-636.
OECD Harmonized Template:	Water Solubility
HERO ID:	5774391

EXTRACTION

Parameter	Data
Water Solubility	8.70 - 9.6 mg/L
CASRN and Test Material	84-74-2; Di-n-butyl-ortho-phthalate (DBop)
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	None; NR; NR; NR
Radiolabel, Source, State, and Purity	No; Aldrich Chemical Company (Milwaukee, WI); NR; >99% Notes: Authors tested a commercial product from Aldrich and a high purity product synthesized for aquatic testing from Oak Ridge National Laboratory (Oak Ridge, TN).
Temperature	Not reported
System	Two methods used: Blended stock with centrifugation and Turbidity inflection; ASTM methods with documented deviations.
pH	Not reported
Results Details Method	Centrifugation: chemical analysis was performed on the supernatant; Turbidity inflection: Hach Turbidity Meter - Nephelometric Turbidity Units (NTU) values were plotted vs. nominal concentrations.
Standard Deviation Results	Not reported
Results Details	Commercial product: Centrifugation results = 8.70 mg/L, Turbidity inflection = 9.40 mg/L; Synthesized product: Centrifugation results = 9.60 mg/L, Turbidity inflection = 9.40 mg/L

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 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	Medium	Data are obtained by accepted standard analytical methods with noted modification. Temperature not reported.
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

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Study Citation:	Defoe, D. L., Holcombe, G. W., Hammermeister, D. E., Biesinger, K. E. (1990). Solubility and toxicity of eight phthalate esters to four aquatic organisms. Environmental Toxicology and Chemistry 9(5):623-636.
OECD Harmonized Template:	Water Solubility
HERO ID:	5774391

EVALUATION

Domain	Metric	Rating	Comments

Study Citation:	EC/HC, (1994). Canadian environmental protection act priority substances list assessment report: Dibutyl phthalate.
OECD Harmonized Template:	Water Solubility
HERO ID:	1333071

EXTRACTION

Parameter	**Data**
Water Solubility	ca. 10 mg/L
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; not specified; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Temperature	Not Reported
System	Not Reported
pH	Not Reported
Results Details Method	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 or other physical/chemical properties or behaviors.
Domain 2: Test Reliability				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	here 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	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: McKone, T.E. and D.W. Layton, "Exposure and Risk Assessment of Toxic Waste in a Multimedia Context," 79th Annual Meeting of the Air Pollution Control Association, Minneapolis, MI, June 22-27, 1986, Vol. 1, 86-12.1, 16 pp. (1986).

Study Citation:	EC/HC, (1994). Canadian environmental protection act priority substances list assessment report: Dibutyl phthalate.
OECD Harmonized Template:	Water Solubility
HERO ID:	1333071

EXTRACTION

Parameter	**Data**
Water Solubility	4500 mg/L
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; not specified; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Temperature	Not Reported
System	Not Reported
pH	Not Reported
Results Details Method	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 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	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	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: Leyder, F. and P. Boulanger, "Ultraviolet Absorption, Aqueous Solubility, and Octanol-water Partition for Several Phthalates," Bull. Environ. Contam. Toxicol., 30:152-157 (1983).

Study Citation:	EC/HC, (2015). State of the science report: Phthalate substance grouping: Medium-chain phthalate esters: Chemical Abstracts Service Registry Numbers: 84-61-7; 84-64-0; 84-69-5; 523-31-9; 5334-09-8;16883-83-3; 27215-22-1; 27987-25-3; 68515-40-2; 71888-89-6.
OECD Harmonized Template:	Water Solubility
HERO ID:	3688160

EXTRACTION

Parameter	**Data**
Water Solubility	11.4 - 13 mg/L
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; experimental; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Temperature	Not Reported
System	Not Reported
pH	Not Reported
Results Details Method	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 (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: cites: Wolfe NL, Steen WC, Burns LA. 1980. Phthalate ester hydrolysis: Linear free energyrelationships. Chemosphere 9:403–8.

Study Citation:	EC/HC, (2017). Draft screening assessment: Phthalate substance grouping.
OECD Harmonized Template:	Water Solubility
HERO ID:	5353181

EXTRACTION

Parameter	**Data**
Water Solubility	11.4 mg/L
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; experimental; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Temperature	not specified
System	not specified
pH	not specified
Results Details Method	not specified
Standard Deviation Results	not specified
Results Details	not specified

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 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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
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: Source cited: ECHA c2007-2015b

Study Citation:	ECETOC, (1985). An assessment of the occurrence and effects of dialkyl ortho-phthalates in the environment.
OECD Harmonized Template:	Water Solubility
HERO ID:	679967

EXTRACTION

Parameter	**Data**
Water Solubility	4.5E6 - ug/L
CASRN and Test Material	Not Reported; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; not specified; NR
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	25 deg C
System	Not Reported
pH	Not Reported
Results Details Method	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 Reliability				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Low	The present authors believe that value are wrong in the light of the other figures quoted.
	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 Low

* Related References: Citing Fishbein and Albro (1972), HERO ID 1313257.

Study Citation:	ECETOC, (1985). An assessment of the occurrence and effects of dialkyl ortho-phthalates in the environment.
OECD Harmonized Template:	Water Solubility
HERO ID:	679967

EXTRACTION

Parameter	Data
Water Solubility	13E3 - ug/L
CASRN and Test Material	Not Reported; DBP
Confidentiality, Type, and Guideline	No; not specified; NR
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	Not Reported
System	Not Reported
pH	Not Reported
Results Details Method	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 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	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: Citing Wolfe , N.L., Steen, W.C. and Burns, L.A. (1979). Unpublished report available from US EPA, Environ. Res. Lab., Athens, Georgia. No HERO ID.

Study Citation:	ECETOC, (1985). An assessment of the occurrence and effects of dialkyl ortho-phthalates in the environment.
OECD Harmonized Template:	Water Solubility
HERO ID:	679967

EXTRACTION

Parameter	Data
Water Solubility	11E3 - ug/L
CASRN and Test Material	Not Reported; DBP
Confidentiality, Type, and Guideline	No; not specified; NR
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	25 deg C
System	Not Reported
pH	Not Reported
Results Details Method	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 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	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: Citing CMA (1983). Measurement of the water-solubility of phthalate esters. Final report, Contract PE-11. 0-WS-SRL. Ll533-06, Syracuse Res. Corp., April, 1983. No HERO ID.

Study Citation:	ECETOC, (1985). An assessment of the occurrence and effects of dialkyl ortho-phthalates in the environment.
OECD Harmonized Template:	Water Solubility
HERO ID:	679967

EXTRACTION

Parameter	Data
Water Solubility	10E3 - ug/L
CASRN and Test Material	Not Reported; DBP
Confidentiality, Type, and Guideline	No; not specified; NR
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	20 deg C
System	Not Reported
pH	Not Reported
Results Details Method	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 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	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: Citing Leyder and Boulanger (1983) HERO ID 679764.

Study Citation:	ECHA, (2012). Committee for Risk Assessment (RAC) Committee for Socio-economic Analysis (SEAC): Background document to the Opinion on the Annex XV dossier proposing restrictions on four phthalates: Annexes.
OECD Harmonized Template:	Water Solubility
HERO ID:	7325405

EXTRACTION

Parameter	**Data**
Water Solubility	10 mg/L
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	none; not specified; not specified
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Temperature	20°C
System	not specified
pH	not specified
Results Details Method	not specified
Standard Deviation Results	not specified
Results Details	not specified

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 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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
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: Source cited: EU RAR (2004) EU RAR (2004). European Chemicals Bureau (2004). European Union Risk Assessment Report. Dibutyl phthalate, with addendum 2004. Available at: http://esis.jrc.ec.europa.eu/doc/existing-chemicals/risk_assessment/REPORT/dibutylphthalatereport003.pdf

Study Citation:	ECJRC, (2004). Summary Risk Assessment Report: Dibutyl phthalate with addendum to the environment section — 2004.
OECD Harmonized Template:	Water Solubility
HERO ID:	3661484

EXTRACTION

Parameter	**Data**
Water Solubility	10 mg/L
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; not specified; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; >99% (w/w)
Temperature	20°C
System	Not Reported
pH	Not Reported
Results Details Method	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	Reported data are consistent with the subject chemical substance structural features.
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	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: specific reference not identified but include: Banerjee and Howard (1984), BASF (corporate data), BUA (1987), Hoyer and Pepperle (1958), Hüls (corporate data); Leyder and Boulanger (1983), Patty (1981)

Study Citation:	Elsevier, (2019). Reaxys: physical-chemical property data for dibutyl phthalate. CAS Registry Number: 84-74-2..
OECD Harmonized Template:	Water Solubility
HERO ID:	5926413

EXTRACTION

Parameter	**Data**
Water Solubility	1.5 - 14.6 mg/L
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
pH	Not reported
Results Details Method	Reported as 0.0015 to 0.0146 g/L at 25 C
Standard Deviation Results	Not Reported
Results Details	12 data points were reported in Reaxys; 3 values were reported at 1.5 to 14.6 mg/L at standard temperature; 9 data points were measured at non-standard temperatures.

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'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 Determination High

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

Study Citation:	Howard, P. H., Banerjee, S., Robillard, K. H. (1985). Measurement of water solubilities octanol-water partition coefficients and vapor pressures of commercial phthalate esters. Environmental Toxicology and Chemistry 4(5):653-662.
OECD Harmonized Template:	Water Solubility
HERO ID:	679985

EXTRACTION

Parameter	Data
Water Solubility	11.2 mg/L
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; If more than one manufacturer produced the individual PAE, the PAE product provided to us was an equal-proportion blend.
Radiolabel, Source, State, and Purity	NR; Provided to Chemical Manufacturers' Association by U.S. manufacturers.; NR; Each sample contained less than 1 % of non-PAE material, as determined by another laboratory. Notes: single isomer
Temperature	25°C
System	Protocol was designed to meet or exceed the requirements of the EPA-recommended procedure stated in U.S. Environmental Protection Agency. 1979. TSCA premanufacture testing of new chemical substances: Water solubility. Fed. Reg. 44: 16253-16259.
pH	Not reported
Results Details Method	HPLC
Standard Deviation Results	0.3
Results Details	ASTM Type 2 water

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) and other physical/chemical properties.
Domain 2: Test Reliability				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	Standard test method used.
	Metric 4:	Reliability/Analytical Method	High	Protocol was designed to meet or exceed the requirements of the EPA-recommended procedure.
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

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Study Citation:	Howard, P. H., Banerjee, S., Robillard, K. H. (1985). Measurement of water solubilities octanol-water partition coefficients and vapor pressures of commercial phthalate esters. Environmental Toxicology and Chemistry 4(5):653-662.
OECD Harmonized Template:	Water Solubility
HERO ID:	679985

EVALUATION

Domain	Metric	Rating	Comments

Study Citation:	Ishak, H., Stephan, J., Karam, R., Goutaudier, C., Mokbel, I., Saliba, C., Saab, J. (2016). Aqueous solubility, vapor pressure and octanol-water partition coefficient of two phthalate isomers dibutyl phthalate and di-isobutyl phthalate contaminants of recycled food packages. Fluid Phase Equilibria 427:362-370.
OECD Harmonized Template:	Water Solubility
HERO ID:	3475635

EXTRACTION

Parameter	**Data**
Water Solubility	6.350E-7
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; Sigma-Aldrich; NR; 99% Notes: Used without further purification
Temperature	298.15 K
System	Water solubility measured using a dynamic saturation apparatus with quantification via HPLC-UV. Methanol was used as the solvent for elution.
pH	Not reported
Results Details Method	Temperature measurement accuracy was ±0.02 K.
Standard Deviation Results	1.18E-6
Results Details	Value reported as mole fraction, where mole fraction = n solute / (n water + n solute). The value could not be converted to standard units as the volume of water used was not reported in this paper. Value initially reported as 6.350E7 but based on later references to solubilities of "10^-7", this is believed to be a typo. Average of three replicates measured at atmospheric pressure.

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	Medium	Data cannot be converted to standard units and therefore appropriateness cannot be verified, but is likely to be appropriate based on the data's inclusion in a peer-reviewed article.
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 non-standard but is expected to be appropriate.
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.

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Study Citation:	Ishak, H., Stephan, J., Karam, R., Goutaudier, C., Mokbel, I., Saliba, C., Saab, J. (2016). Aqueous solubility, vapor pressure and octanol-water partition coefficient of two phthalate isomers dibutyl phthalate and di-isobutyl phthalate contaminants of recycled food packages. Fluid Phase Equilibria 427:362-370.
OECD Harmonized Template:	Water Solubility
HERO ID:	3475635

EVALUATION

Domain	Metric	Rating	Comments
Overall Quality Determination		**Medium**	

Study Citation:	Ishak, H., Stephan, J., Karam, R., Goutaudier, C., Mokbel, I., Saliba, C., Saab, J. (2016). Aqueous solubility, vapor pressure and octanol-water partition coefficient of two phthalate isomers dibutyl phthalate and di-isobutyl phthalate contaminants of recycled food packages. Fluid Phase Equilibria 427:362-370.
OECD Harmonized Template:	Water Solubility
HERO ID:	3475635

EXTRACTION

Parameter	**Data**
Water Solubility	6.507E-7
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; Sigma-Aldrich; NR; 99% Notes: Used without further purification
Temperature	308.15 K
System	Water solubility measured using a dynamic saturation apparatus with quantification via HPLC-UV. Methanol was used as the solvent for elution.
pH	Not reported
Results Details Method	Temperature measurement accuracy was ±0.02 K.
Standard Deviation Results	8.05E-5
Results Details	Value reported as mole fraction, where mole fraction = n solute / (n water + n solute). The value could not be converted to standard units as the volume of water used was not reported in this paper. Value initially reported as 6.507E7 but based on later references to solubilities of "10^-7", this is believed to be a typo. Average of three replicates measured at atmospheric pressure.

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	Medium	Data cannot be converted to standard units and therefore appropriateness cannot be verified, but is likely to be appropriate based on the data's inclusion in a peer-reviewed article.
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 non-standard but is expected to be appropriate.
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 — Medium

Study Citation:	Ishak, H., Stephan, J., Karam, R., Goutaudier, C., Mokbel, I., Saliba, C., Saab, J. (2016). Aqueous solubility, vapor pressure and octanol-water partition coefficient of two phthalate isomers dibutyl phthalate and di-isobutyl phthalate contaminants of recycled food packages. Fluid Phase Equilibria 427:362-370.
OECD Harmonized Template:	Water Solubility
HERO ID:	3475635

EXTRACTION

Parameter	**Data**
Water Solubility	7.074E-7
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; Sigma-Aldrich; NR; 99% Notes: Used without further purification
Temperature	318.15 K
System	Water solubility measured using a dynamic saturation apparatus with quantification via HPLC-UV. Methanol was used as the solvent for elution.
pH	Not reported
Results Details Method	Temperature measurement accuracy was ±0.02 K.
Standard Deviation Results	1.11E-6
Results Details	Value reported as mole fraction, where mole fraction = n solute / (n water + n solute). The value could not be converted to standard units as the volume of water used was not reported in this paper. Value initially reported as 7.074E7 but based on later references to solubilities of "10^-7", this is believed to be a typo. Average of three replicates measured at atmospheric pressure.

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	Medium	Data cannot be converted to standard units and therefore appropriateness cannot be verified, but is likely to be appropriate based on the data's inclusion in a peer-reviewed article.
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 non-standard but is expected to be appropriate.
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 Medium

Study Citation:	Ishak, H., Stephan, J., Karam, R., Goutaudier, C., Mokbel, I., Saliba, C., Saab, J. (2016). Aqueous solubility, vapor pressure and octanol-water partition coefficient of two phthalate isomers dibutyl phthalate and di-isobutyl phthalate contaminants of recycled food packages. Fluid Phase Equilibria 427:362-370.
OECD Harmonized Template:	Water Solubility
HERO ID:	3475635

EXTRACTION

Parameter	**Data**
Water Solubility	8.234E-7
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; Sigma-Aldrich; NR; 99% Notes: Used without further purification
Temperature	328.15 K
System	Water solubility measured using a dynamic saturation apparatus with quantification via HPLC-UV. Methanol was used as the solvent for elution.
pH	Not reported
Results Details Method	Temperature measurement accuracy was ±0.02 K.
Standard Deviation Results	2.80E-5
Results Details	Value reported as mole fraction, where mole fraction = n solute / (n water + n solute). The value could not be converted to standard units as the volume of water used was not reported in this paper. Value initially reported as 8.234E7 but based on later references to solubilities of "10^-7", this is believed to be a typo. Average of three replicates measured at atmospheric pressure.

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	Medium	Data cannot be converted to standard units and therefore appropriateness cannot be verified, but is likely to be appropriate based on the data's inclusion in a peer-reviewed article.
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 non-standard but is expected to be appropriate.
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 — Medium

Study Citation:	Lu, C. (2009). Prediction of environmental properties in water-soil-air systems for phthalates. Bulletin of Environmental Contamination and Toxicology 83(2):168-173.
OECD Harmonized Template:	Water Solubility
HERO ID:	807140

EXTRACTION

Parameter	Data
Water Solubility	9.9 mg/L
CASRN and Test Material	84-74-2; di-n-butyl phthalate
Confidentiality, Type, and Guideline	none; QSAR; Quantitative Structure-Property relationship model for estimation of water solubility
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: DBP
Temperature	not applicable
System	QSPR model using the Lu index, which is based on the shortest distance matrix.
pH	not applicable
Results Details Method	Predictive model developed using Lu index: Log Sw = 8.2431 - 0.5718 (Lu)
Standard Deviation Results	Not Reported
Results Details	n = 34; correlation coefficient (R) = 0.9869; standard error (SE) = 0.44; leave-one-out cross validation correlation coefficient (Rsv) = 0.9709; corresponding standarderrors (scv) = 0.47

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)	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	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	Uninformative	The QSPR model failed the standard error threshold of <0.3 and is therefore rated unacceptable.

Overall Quality Determination — Medium

Study Citation:	Mueller, M., Klein, W. (1992). Comparative evaluation of methods predicting water solubility for organic compounds. Chemosphere 25(6):769-782.
OECD Harmonized Template:	Water Solubility
HERO ID:	654554

EXTRACTION

Parameter	**Data**
Water Solubility	11.2 mg/L
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Calculation; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Temperature	Not reported
System	Statistical estimation in relation to partition coefficients.
pH	Not reported
Results Details Method	Not Reported
Standard Deviation Results	Not Reported
Results Details	Reported as 4.02E-5 mol/L

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	Medium	Calculated data 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	N/A	This matrix is not applicable to this calculated data.
Domain 3: Other				
	Metric 5:	Databases	N/A	This matrix is not applicable to this calculated data.
	Metric 6:	Models	High	The model had a defined, unambiguous endpoint and the model performance was known.

Overall Quality Determination High

Study Citation:	NIOSH, (1976). Occupational health guideline for dibutylphthalate.
OECD Harmonized Template:	Water Solubility
HERO ID:	10182525

EXTRACTION

Parameter	Data
Water Solubility	0.45 - g/100 g water
CASRN and Test Material	NR; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Not specified; NR
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	20°C
System	NR
pH	NR
Results Details Method	NR
Standard Deviation Results	NR
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 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	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

Study Citation:	NIOSH, (2007). NIOSH pocket guide to chemical hazards.
OECD Harmonized Template:	Water Solubility
HERO ID:	192177

EXTRACTION

Parameter	**Data**
Water Solubility	0.001 - g/100 ml
CASRN and Test Material	84-74-2; Dibutyl phthalate
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 Notes: NR
Temperature	77°F
System	NR
pH	NR
Results Details Method	NR
Standard Deviation Results	NR
Results Details	Solubility in water at 77°F reported as % by weight (g/100 ml)

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'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	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:	NIOSH, (2019). NIOSH pocket guide to chemical hazards: Dibutyl phthalate.
OECD Harmonized Template:	Water Solubility
HERO ID:	8407729

EXTRACTION

Parameter	Data
Water Solubility	0.001 - %
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; Not specified; NR
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	NR
System	NR
pH	NR
Results Details Method	NR
Standard Deviation Results	NR
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 (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	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

Study Citation:	NLM, (2024). PubChem: Hazardous Substance Data Bank: Dibutyl phthalate, 84-74-2.
OECD Harmonized Template:	Water Solubility
HERO ID:	5926108

EXTRACTION

Parameter	**Data**
Water Solubility	11.2 mg/L
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
System	Not Reported
pH	Not reported
Results Details Method	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'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 publicly available database that provides 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

* Related References: Howard, P.H. et al. 1985. Environ Tox and Chem 4: 653-61.

Study Citation:	Rumble, J. R. (2018). Aqueous solubility and Henry's law constants of organic compounds. :5-148 - 5-177.
OECD Harmonized Template:	Water Solubility
HERO ID:	5932745

EXTRACTION

Parameter	**Data**
Water Solubility	11 mg/L
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
pH	Not reported
Results Details Method	Originally reported as 0.0112 g/kg H20, converted using CRC handbook's reported water density at 25 C.
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'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 peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination — High

Study Citation:	SRC, (1983). Measurement of the water solubilities of phthalate esters (final report).
OECD Harmonized Template:	Water Solubility
HERO ID:	1316216

EXTRACTION

Parameter	**Data**
Water Solubility	11.2 - mg/L
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	No; experimental; Measured test compound solubility in water by HPLC
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	25ºC
System	Samples shaken in distilled water, centrifuged and then analyzed
pH	Not Reported
Results Details Method	HPLC
Standard Deviation Results	±0.3
Results Details	Value reported based on curvilinear equation. Previously reported value = 12.2±0.2,value obtained by auditor = 11.2±0.3 (linear equation).

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 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	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:	U.S. EPA, (2019). Chemistry Dashboard Information for Dibutyl Phthalate. 84-74-2..
OECD Harmonized Template:	Water Solubility
HERO ID:	5926161

EXTRACTION

Parameter	**Data**
Water Solubility	11.2 mg/L
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
pH	Not reported
Results Details Method	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'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 publicly available database that provides 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

* Related References: PhysProp. Howard, PH et al. 1985.

Study Citation:	Elsevier, (2019). Reaxys: physical-chemical property data for dibutyl phthalate. CAS Registry Number: 84-74-2..
OECD Harmonized Template:	Flash Point
HERO ID:	5926413

EXTRACTION

Parameter	**Data**
Flash Point	168 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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				
	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	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: Gasanov; Azizov; Alieva; Mamedov; Babaeva; Rustamov; Ayubov; Russian Journal of Applied Chemistry; vol. 81; nb. 4; (2008); p. 720 - 722

Study Citation:	NIOSH, (2007). NIOSH pocket guide to chemical hazards.
OECD Harmonized Template:	Flash Point
HERO ID:	192177

EXTRACTION

Parameter	**Data**
Flash Point	315 - F
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; closed cup
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR
System	closed cup
Standard Deviation Results	NR
Results Details	NR

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)	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	Analytical method 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	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:	NLM, (2024). PubChem: Hazardous Substance Data Bank: Dibutyl phthalate, 84-74-2.
OECD Harmonized Template:	Flash Point
HERO ID:	5926108

EXTRACTION

Parameter	**Data**
Flash Point	315 F
CASRN and Test Material	84-74-2; Dibutyl phthalate
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	Closed cup
Standard Deviation Results	Not reported
Results Details	157°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	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	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: National Fire Protection Association; Fire Protection Guide to Hazardous Materials. 14TH Edition, Quincy, MA 2010, p. 325-39

Study Citation:	O'Neil, M. J. (2013). Dibutyl phthalate. :550.
OECD Harmonized Template:	Flash Point
HERO ID:	5348015

EXTRACTION

Parameter	**Data**
Flash Point	171 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Open cup
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	171°C (340°F)

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)	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 recognized, peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	RSC, (2019). ChemSpider: Dibutyl phthalate.
OECD Harmonized Template:	Flash Point
HERO ID:	5926136

EXTRACTION

Parameter	**Data**
Flash Point	157.2222 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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				
	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 and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a publicly available database that provides references to the original, peer-reviewed source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination Medium

* Related References: NIOSH

Study Citation:	RSC, (2019). ChemSpider: Dibutyl phthalate.
OECD Harmonized Template:	Flash Point
HERO ID:	5926136

EXTRACTION

Parameter	**Data**
Flash Point	157 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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				
	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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination — Medium

* Related References: Oxford University Chemical Safety Data

Study Citation:	RSC, (2019). ChemSpider: Dibutyl phthalate.
OECD Harmonized Template:	Flash Point
HERO ID:	5926136

EXTRACTION

Parameter	**Data**
Flash Point	117 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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				
	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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination — Medium

* Related References: Alfa Aesar

Study Citation:	RSC, (2019). ChemSpider: Dibutyl phthalate.
OECD Harmonized Template:	Flash Point
HERO ID:	5926136

EXTRACTION

Parameter	**Data**
Flash Point	157 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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				
	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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination — Medium

* Related References: LabNetwork

Study Citation:	RSC, (2019). ChemSpider: Dibutyl phthalate.
OECD Harmonized Template:	Flash Point
HERO ID:	5926136

EXTRACTION

Parameter	**Data**
Flash Point	171 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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				
	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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination — Medium

* Related References: Alfa Aesar

Study Citation:	RSC, (2019). ChemSpider: Dibutyl phthalate.
OECD Harmonized Template:	Flash Point
HERO ID:	5926136

EXTRACTION

Parameter	**Data**
Flash Point	171 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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				
	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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available database that provides references to the original, peer-reviewed source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination — Medium

* Related References: Sigma-Aldrich

Study Citation:	Rumble, J. R. (2018). Flammability of chemical substances. :16-16 - 16-32.
OECD Harmonized Template:	Flash Point
HERO ID:	6655446

EXTRACTION

Parameter	**Data**
Flash Point	157 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
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				
	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	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 known data-collection, prepared by experts in the field.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	NCBI, (2020). PubChem Compound Summary for CID 3026 Dibutyl phthalate.
OECD Harmonized Template:	Autoflammability
HERO ID:	6629198

EXTRACTION

Parameter	**Data**
Auto-flammability	757 F
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Not specified
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	402°C
Results Value	757°F

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)	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: National Fire Protection Association; Fire Protection Guide to Hazardous Materials. 14TH Edition, Quincy, MA 2010, p. 325-39

Study Citation:	NCBI, (2020). PubChem Compound Summary for CID 3026 Dibutyl phthalate.
OECD Harmonized Template:	Autoflammability
HERO ID:	6629198

EXTRACTION

Parameter	Data
Auto-flammability	402 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Not specified
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
Results Value	402°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	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	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: ILO International Chemical Safety Cards (ICSC)

Study Citation:	NIOSH, (1976). Occupational health guideline for dibutylphthalate.
OECD Harmonized Template:	Autoflammability
HERO ID:	10182525

EXTRACTION

Parameter	**Data**
Auto-flammability	403 - C
CASRN and Test Material	NR; Dibutyl phthalate
Confidentiality, Type, and Guideline	No; not specified; NR
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
System	NR
Standard Deviation Results	Not Reported
Results Details	Also reported as 757 F
Results Value	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)	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

Study Citation:	NLM, (2024). PubChem: Hazardous Substance Data Bank: Dibutyl phthalate, 84-74-2.
OECD Harmonized Template:	Autoflammability
HERO ID:	5926108

EXTRACTION

Parameter	**Data**
Auto-flammability	757 F
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Not specified
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	402°C
Results Value	757°F

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)	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 reference to the 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: U.S. Coast Guard. 1999. Chemical Hazard Response Information System (CHRIS) - Hazardous Chemical Data. Commandant Instruction 16465.12C. Washington, D.C.: U.S. Government Printing Office.

Study Citation:	Rumble, J. R. (2018). Flammability of chemical substances. :16-16 - 16-32.
OECD Harmonized Template:	Autoflammability
HERO ID:	6655446

EXTRACTION

Parameter	**Data**
Auto-flammability	402 C
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; not specified; 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
Results Value	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)	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 known data-collection, prepared by experts in the field.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	OECD, (2016). Report On The Proposal For Classification And Labelling (C&L) Of Dibutyl Phthalate.
OECD Harmonized Template:	pKa
HERO ID:	10172655

EXTRACTION

Parameter	**Data**
pK_a	3.21 -
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	No; not specified; NR
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	Not Reported
System	Not Reported
pH	Not Reported
Results Details Method	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	Low	Data measured are not consistent with the subject chemical substance structural properties, features or behaviors, or the structural features.
Domain 2: Test Reliability				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Low	The methodology indicates that method bias is likely.
	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 — Uninformative

* Related References: Citing ECHA, 2008. http://echa.europa.eu/documents/10162/13638/svhc_supdoc_dibutylphthalate_publication_en.pdf. Primary source not available for review.

Study Citation:	Chervonenkis, A. A., Chalykh, A. E. (2001). Correlation of molecular shape and structure with kinetic and physical-chemical properties of complex phthalate liquids. Journal of Molecular Liquids 93(1-3):43-46.
OECD Harmonized Template:	Viscosity
HERO ID:	1312213

EXTRACTION

Parameter	**Data**
Viscosity	12.9
CASRN and Test Material	84-74-2; Dibutyl phthalate
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; Purchased and used without further purification
Temperature	30°C
Test Conditions	Kinematic viscosity measurements made using a calibrated Ostvald-Fenske glass capillary viscosimeter in distilled water
Standard Deviation Results	Accuracy estimated as ±5%
Results Details	Kinematic viscosity data were converted to dynamic viscosity using measured density data interpolated at the same temperature

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)	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 Quality Determination Medium

Study Citation:	Derjaguin, B. V., Bazaron, U. B., Lamazhapova, K. D., Tsidypov, B. D. (1992). Shear elasticity of low-viscosity liquids at low-frequencies. Progress in Surface Science 40(1-4):462-465.
OECD Harmonized Template:	Viscosity
HERO ID:	5432953

EXTRACTION

Parameter	**Data**
Viscosity	16.66
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Calculation; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Temperature	25°C
Test Conditions	Calculated from n = 2(Rs*Xs)/ wp; Where Rs is active part of the liquid, Xs is the reactive part of the shear impedance of the liquid, w (omega) is the cyclic frequency of the experiment, and p (rho) is the density.
Standard Deviation Results	Not Reported
Results Details	p = 1.041 g/cm^3; Rs = 4758 ohm cm^-2; Xs = 4604 ohm cm^-2; w = 40 mHz

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)	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	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

* Related References: McSkimin, H.T., P. Andreatch. 1967. J Acoust Sci Am 42, 248.

Study Citation:	Derjaguin, B. V., Bazaron, U. B., Lamazhapova, K. D., Tsidypov, B. D. (1992). Shear elasticity of low-viscosity liquids at low-frequencies. Progress in Surface Science 40(1-4):462-465.
OECD Harmonized Template:	Viscosity
HERO ID:	5432953

EXTRACTION

Parameter	**Data**
Viscosity	16.37
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
Test Conditions	Not Reported
Standard Deviation Results	Not Reported
Results Details	Known value of tabular viscosity

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)	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	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

* Related References: McSkimin, H.T., P. Andreatch. 1967. J Acoust Soc Am 42, 248

Study Citation:	Dufour, J., Jorat, L., Bondeau, A., Siblini, A., Noyel, G. (1994). Shear viscosity and dielectric relaxanon time of dibutyl phthalate down to glass transition temperature. Journal of Molecular Liquids 62(1-3):75-82.
OECD Harmonized Template:	Viscosity
HERO ID:	5432882

EXTRACTION

Parameter	**Data**
Viscosity	51900
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; OECD Guideline 114: Viscosity of liquids
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Temperature	-55.5°C
Test Conditions	Measurements made with a visco penetrometer built in the laboratory.Purity not stated
Standard Deviation Results	Not Reported
Results Details	(oC) (Pa.s)- 55.5 51.9- 57.6 71.2- 59.0 106- 74.0 7583- 82.9 4.87 10^5- 83.3 7.65 10^5- 84.2 8.57 10^5- 86.0 2.40 10^6- 91.0 1.15 10^8- 92.2 5.18 10^8- 92.7 7.27 10^8

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)	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	High	The analytical method is non-standard but is expected to be appropriate.
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

Study Citation:	Elsevier, (2019). Reaxys: physical-chemical property data for dibutyl phthalate. CAS Registry Number: 84-74-2..
OECD Harmonized Template:	Viscosity
HERO ID:	5926413

EXTRACTION

Parameter	**Data**
Viscosity	14 - 20.431
CASRN and Test Material	84-74-2; Dibutyl phthalate
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	20-25°C
Test Conditions	Not Reported
Standard Deviation Results	Not Reported
Results Details	At 20-25°C; 20 values were reported in Reaxys; 7 values were reported in the range of 14 to 20.431 at 20-25°C; 13 values were outside this range or measured at unreported or non-standard temperatures.

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)	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: Data range determined from multiple primary sources in REAXYS.

Study Citation:	NLM, (2024). PubChem: Hazardous Substance Data Bank: Dibutyl phthalate, 84-74-2.
OECD Harmonized Template:	Viscosity
HERO ID:	5926108

EXTRACTION

Parameter	**Data**
Viscosity	20.3
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
Test Conditions	Not Reported
Standard Deviation Results	Not Reported
Results Details	0.203 P

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)	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 publicly available, peer-reviewed database that provides references to a recognized data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

* Related References: Lewis, R.J. Sr. 2007. Hawley's Condensed Chemical Dictionary 15th Edition. John Wiley & Sons, Inc. New York, NY. P. 398.

Study Citation:	Rumble, J. R. (2018). Viscosity of liquids. :6-234 - 6-237.
OECD Harmonized Template:	Viscosity
HERO ID:	5932747

EXTRACTION

Parameter	**Data**
Viscosity	16.63
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
Test Conditions	Not Reported
Standard Deviation Results	Not Reported
Results Details	483 cP at -25°C; 66.4 cP at 0 deg C; 6.47 cP at 50 deg C; 3.5 cP at 75 deg C; 2.43 cP at 100 deg 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	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	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 peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	Cacoullis, S., Dolan, M. B. (1990). The optical constants of di-iso-octyl phthalate and di-n-butyl phthalate. 30(1):55-59.
OECD Harmonized Template:	Refractive Index
HERO ID:	5494636

EXTRACTION

Parameter	**Data**
Refractive Index	1.266 - 1.646
CASRN and Test Material	84-74-2; Dibutyl phthalate
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	Method combined three techniques to find optical constants: reflectometry, transmission and Kramers-Kronig dispersion analysis using an automated reflectometer for the measurements.
Standard Deviation Results	Experimental uncertainty = 0.5%
Results Details	Measured at wavelengths from 2.0 to 16.0 um
Results Details Methods	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)	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

Study Citation:	Elsevier, (2019). Reaxys: physical-chemical property data for dibutyl phthalate. CAS Registry Number: 84-74-2..
OECD Harmonized Template:	Refractive Index
HERO ID:	5926413

EXTRACTION

Parameter	**Data**
Refractive Index	1.486 - 1.5011
CASRN and Test Material	84-74-2; Dibutyl phthalate
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	20-25°C
System	Not Reported
Standard Deviation Results	Not Reported
Results Details	20-25°C; 18 values were reported in Reaxys; 18 values were reported in the range of 1.486 to 1.5011 at 20-25°C.
Results Details Methods	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)	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: Data range determined from multiple primary sources in REAXYS.

Study Citation:	Liu, L., Shen, L., Yang, F., Han, F., Hu, P., Song, M. (2016). Determining Phthalic Acid Esters Using Terahertz Time Domain Spectroscopy. Journal of Applied Spectroscopy 83(4):603-609.
OECD Harmonized Template:	Refractive Index
HERO ID:	3540862

EXTRACTION

Parameter	**Data**
Refractive Index	1.563
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	99.99% pure alcohol; NR; Room temperature; NR
Radiolabel, Source, State, and Purity	NR; Dr. Ehrenstorfer GmbH; Liquid; 99.0%
Temperature	24°C
System	A split Ti:sapphire mode-lock laser pulse was used to trigger THz pulses that were collected and collimated using a pair of gold coated off-axis parabolic mirrors and transmitted through the sample to be investigated.
Standard Deviation Results	Not reported
Results Details	The reference signal is a THz pulse transmitted through the empty crystal cell with a correction applied to account for the effect of the crystal cell absorbing THz waves. The experimental result is entered into a mathematical equation to calculate the refractive index.
Results Details Methods	Not Reported
Parameter	Not Reported

EVALUATION

Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data was 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)	High	Methodology clearly stated.
	Metric 4:	Reliability/Analytical Method	High	Experimental procedures and analytical methods were clearly delineated.
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

Study Citation:	NLM, (2024). PubChem: Hazardous Substance Data Bank: Dibutyl phthalate, 84-74-2.
OECD Harmonized Template:	Refractive Index
HERO ID:	5926108

EXTRACTION

Parameter	**Data**
Refractive Index	1.4900
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
System	Not Reported
Standard Deviation Results	Not Reported
Results Details	Not Reported
Results Details Methods	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)	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 publicly available, peer-reviewed database that provides references to a recognized data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

* Related References: O'Neil, M.J. (Ed.) 2013. The Merck Index - An Encyclopedia of Chemicals, Drugs, and Biologicals. Whitehouse Station, NJ: Merck and Co., Inc. 2006. p. 550

Study Citation:	O'Neil, M. J. (2013). Dibutyl phthalate. :550.
OECD Harmonized Template:	Refractive Index
HERO ID:	5348015

EXTRACTION

Parameter	**Data**
Refractive Index	1.4900
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
System	Not Reported
Standard Deviation Results	Not Reported
Results Details	Not Reported
Results Details Methods	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)	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 publicly available, peer-reviewed database that provides references to a recognized data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	RSC, (2019). ChemSpider: Dibutyl phthalate.
OECD Harmonized Template:	Refractive Index
HERO ID:	5926136

EXTRACTION

Parameter	**Data**
Refractive Index	1.492
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
Standard Deviation Results	Not Reported
Results Details	Not Reported
Results Details Methods	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)	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	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination Medium

* Related References: Alfa Aesar

Study Citation:	Rumble, J. R. (2018). Dibutyl phthalate. :3-16.
OECD Harmonized Template:	Refractive Index
HERO ID:	5348244

EXTRACTION

Parameter	**Data**
Refractive Index	1.4911 -
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	None; Experimental; NR
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR
Temperature	20
System	NR
Standard Deviation Results	NR
Results Details	NR
Results Details Methods	NR
Parameter	NR

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)	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 publicly available, peer-reviewed database that provides references to a recognized data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:	Cousins, I., Mackay, D. (2000). Correlating the physical–chemical properties of phthalate esters using the 'three solubility' approach. Chemosphere 41(9):1389-1399.
OECD Harmonized Template:	Henry's Law
HERO ID:	4159647

EXTRACTION

Parameter	**Data**
Henry's Law	0.133 Pa m3/mol
CASRN and Test Material	84-74-2; Di-n-butyl phthalate
Confidentiality, Type, and Guideline	None; QSAR; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: DnBP
Temperature	25°C
pH	Not reported
System	Three solubility approach: a quantitative structure-property relationship; correlations between apparent-solubilities of liquid state compounds in air and water, and molecular structures used to estimate partition coefficient Kaw (air-water)
Standard Deviation Results	Not reported
Results Details	log Kaw = -4.27
Results Details Methods	Not applicable

EVALUATION

Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are 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)	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	N/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.
	Metric 6:	Models	High	The model had a defined, unambiguous endpoint AND the model performance was known and r2 $>$ 0.7, q2 $>$ 0.5, and SE $<$ 0.3.

Overall Quality Determination High

Study Citation:	EC/HC, (1994). Canadian environmental protection act priority substances list assessment report: Dibutyl phthalate.
OECD Harmonized Template:	Henry's Law
HERO ID:	1333071

EXTRACTION

Parameter	**Data**
Henry's Law	<= 6.4 Pa·m3/mol
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; not specified; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Temperature	Not Reported
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	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	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: Howard, P.H., "Large Production and Priority Pollutants," Handbook of Environmental Fate and Exposure Data for Organic Chemicals, Volume I, Lewis Publishers Inc., Chelsea, MI (1989).Montgomery, J.H. and L.M. Welkom, Groundwater Chemicals Desk Reference, Lewis Publishers Inc., Chelsea, MI (1990).McKone, T.E. and D.W. Layton, "Exposure and Risk Assessment of Toxic Waste in a Multimedia Context," 79th Annual Meeting of the Air Pollution Control Association, Minneapolis, MI, June 22-27, 1986, Vol. 1, 86-12.1, 16 pp. (1986).

Study Citation:	EC/HC, (2015). State of the science report: Phthalate substance grouping: Medium-chain phthalate esters: Chemical Abstracts Service Registry Numbers: 84-61-7; 84-64-0; 84-69-5; 523-31-9; 5334-09-8;16883-83-3; 27215-22-1; 27987-25-3; 68515-40-2; 71888-89-6.
OECD Harmonized Template:	Henry's Law
HERO ID:	3688160

EXTRACTION

Parameter	**Data**
Henry's Law	0.124 Pa·m3 /mol
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; not specified; not specified
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Temperature	Not Reported
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	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	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Uninformative	The data are from an unknown source or there are concerns regarding the source of the data.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination — Uninformative

* Related References: reference is not indicated

Study Citation:	ECETOC, (1985). An assessment of the occurrence and effects of dialkyl ortho-phthalates in the environment.
OECD Harmonized Template:	Henry's Law
HERO ID:	679967

EXTRACTION

Parameter	**Data**
Henry's Law	7.4E-5
CASRN and Test Material	Not Reported; DBP
Confidentiality, Type, and Guideline	No; experimental; NR
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	Not Reported
pH	Not Reported
System	No details on the partition coefficient of DBP between air and water reported in this secondary source; more details are expected to be available in the primary source. Reported value assumed to unitless (KH). For the conversion R = 8.205E-5 atm.m3/K.mol and Temperature = 298.15 K. Therefore KH = (0.074E-3) x (8.205E-5 atm.m3/K.mol) x 298.15 K = 1.81 x 10-6 atm.m3/mol (SRC calculated).
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	Measured data are consistent with the subject chemical substance 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	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 (peer-review unknown).
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination — Medium

* Related References: Citing Atlas, E., Velasco, A., Sullivan, K. and Giam, G.S.(1983). A radio-tracer study of air-water exchange of synthetic organic compounds. Chemosphere, 12(9-10), 1251. HERO ID1333633.

Study Citation:	ECETOC, (1985). An assessment of the occurrence and effects of dialkyl ortho-phthalates in the environment.
OECD Harmonized Template:	Henry's Law
HERO ID:	679967

EXTRACTION

Parameter	Data
Henry's Law	1E-4
CASRN and Test Material	Not Reported; DBP
Confidentiality, Type, and Guideline	No; experimental; 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	Not Reported
pH	Not Reported
System	No details on the partition coefficient of DBP between air and water reported in this secondary source; more details are expected to be available in the primary source.
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	Measured data are consistent with the subject chemical substance 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	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 (peer-review unknown).
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination Medium

* Related References: Citing Atlas, E., Velasco, A., Sullivan, K. and Giam, G.S.(1983). A radio-tracer study of air-water exchange of synthetic organic compounds. Chemosphere, 12(9-10), 1251. HERO ID1333633.

Study Citation:	ECJRC, (2004). Summary Risk Assessment Report: Dibutyl phthalate with addendum to the environment section — 2004.
OECD Harmonized Template:	Henry's Law
HERO ID:	3661484

EXTRACTION

Parameter	**Data**
Henry's Law	0.27 Pa.m3/mol
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; not specified; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; >99% (w/w)
Temperature	Not Reported
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	Measured data are consistent with the subject chemical substance structural features.
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	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: specific reference not identified but include: Banerjee and Howard (1984), BASF (corporate data), BUA (1987), Hoyer and Pepperle (1958), Hüls (corporate data); Leyder and Boulanger (1983), Patty (1981)

Study Citation:	Elsevier, (2019). Reaxys: physical-chemical property data for dibutyl phthalate. CAS Registry Number: 84-74-2..
OECD Harmonized Template:	Henry's Law
HERO ID:	5926413

EXTRACTION

Parameter	**Data**
Henry's Law	8.83E-7 atm-m3/mol
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
pH	Not Reported
System	Not Reported
Standard Deviation Results	Not Reported
Results Details	Reported as 0.08947 Pa-m3/mol
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	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 Determination High

* Related References: Staples, Charles A.; Peterson, Dennis R.; Parkerton, Thomas F.; Adams, William J.; Chemosphere; vol. 35; nb. 4; (1997); p. 667 - 749

Study Citation:	EPA,, Danish (2011). Annex XV restriction report: Proposal for a restriction, version 2. Substance name: bis(2-ehtylhexyl)phthlate (DEHP), benzyl butyl phthalate (BBP), dibutyl phthalate (DBP), diisobutyl phthalate (DIBP).
OECD Harmonized Template:	Henry's Law
HERO ID:	7265437

EXTRACTION

Parameter	**Data**
Henry's Law	0.27 - Pa. m3/mol
CASRN and Test Material	84-74-2; NR
Confidentiality, Type, and Guideline	No; Not specified; NR
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR
Temperature	NR
pH	Not Reported
System	NR
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	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	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

Study Citation:	Ishak, H., Stephan, J., Karam, R., Goutaudier, C., Mokbel, I., Saliba, C., Saab, J. (2016). Aqueous solubility, vapor pressure and octanol-water partition coefficient of two phthalate isomers dibutyl phthalate and di-isobutyl phthalate contaminants of recycled food packages. Fluid Phase Equilibria 427:362-370.
OECD Harmonized Template:	Henry's Law
HERO ID:	3475635

EXTRACTION

Parameter	**Data**
Henry's Law	7.47 kPa
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Calculation; Non-guideline
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; Sigma-Aldrich; NR; 99% Notes: Used without further purification
Temperature	298.15 K
pH	Not reported
System	Not reported
Standard Deviation Results	Not reported
Results Details	Value reported as 7.47 kPa
Results Details Methods	Calculated based on experimental vapor pressure (0.0047 Pa) and mole fraction of water solubility (6.350 x 10^-7).

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) [and/or] other 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	The analytical method is non-standard but is expected to be appropriate, based on methods used to derive calculation inputs.
Domain 3: 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.

Overall Quality Determination High

Study Citation:	Ishak, H., Stephan, J., Karam, R., Goutaudier, C., Mokbel, I., Saliba, C., Saab, J. (2016). Aqueous solubility, vapor pressure and octanol-water partition coefficient of two phthalate isomers dibutyl phthalate and di-isobutyl phthalate contaminants of recycled food packages. Fluid Phase Equilibria 427:362-370.
OECD Harmonized Template:	Henry's Law
HERO ID:	3475635

EXTRACTION

Parameter	**Data**
Henry's Law	5.44 Pa·m3/J
CASRN and Test Material	84-74-2; Dibutyl phthalate
Confidentiality, Type, and Guideline	None; Calculation; Non-guideline
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; Sigma-Aldrich; NR; 99% Notes: Used without further purification
Temperature	298.15 K
pH	Not reported
System	Air-water partition coefficient Kaw; calculated using Henry's law constant based on experimental vapor pressure (0.0047 Pa) and mole fraction of water solubility (6.350 x 10^-7); WS: dynamic saturation method; VP: dynamic gas saturation method
Standard Deviation Results	Not reported
Results Details	Reported as 5.44 Pa·m3/J; Kaw = KhMw/RTρw (Kh: Henry's law constant; Mw: molar mass, R: gas constant, ρw: density of water)
Results Details Methods	experimental vapor pressure: HPLC-UV and water solubility: HPLC-UV (using an internal calibration method with BBP)

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) [and/or] other 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	High	The analytical methods are appropriate.
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

Study Citation:	Lu, C. (2009). Prediction of environmental properties in water-soil-air systems for phthalates. Bulletin of Environmental Contamination and Toxicology 83(2):168-173.
OECD Harmonized Template:	Henry's Law
HERO ID:	807140

EXTRACTION

Parameter	**Data**
Henry's Law	Not Reported
CASRN and Test Material	84-74-2; di-n-butyl phthalate
Confidentiality, Type, and Guideline	none; QSAR; Quantitative Structure-Property relationship model for estimation of log Kaw
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: DBP
Temperature	Not Reported
pH	Not Reported
System	Kaw = S(A)/Sw where S(A) is the solubility in air and Sw is the solubility in water
Standard Deviation Results	Not Reported
Results Details	Log Kaw= -4.23
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	N/A	Rating of this factor is not applicable to this kind of information.
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.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	Medium	Modeled data compared well to other data.

Overall Quality Determination Medium

Study Citation:	NLM, (2024). PubChem: Hazardous Substance Data Bank: Dibutyl phthalate, 84-74-2.
OECD Harmonized Template:	Henry's Law
HERO ID:	5926108

EXTRACTION

Parameter	**Data**
Henry's Law	1.81E-6 atm-m3/mol
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
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	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 publicly available database that provides 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

* Related References: Atlas et al. 1983. Chemosphere 12: 1251-8.

Study Citation:	U.S. EPA, (2019). Chemistry Dashboard Information for Dibutyl Phthalate. 84-74-2..
OECD Harmonized Template:	Henry's Law
HERO ID:	5926161

EXTRACTION

Parameter	**Data**
Henry's Law	1.81E-6 atm-m3/mol
CASRN and Test Material	84-74-2; Dibutyl phthalate
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	23°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	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 publicly available database that provides 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

* Related References: PhysProp. Atlas, E. et al. 1983

Study Citation:	WHO, (1997). Environmental health criteria 189. Di-n-butyl phthalate. ENVIRONMENTAL HEALTH CRITERIA(0):GENEVA.
OECD Harmonized Template:	Henry's Law
HERO ID:	1333030

EXTRACTION

Parameter	**Data**
Henry's Law	4.6x10-7 atm-m3/mol
CASRN and Test Material	84-74-2; dibutyl phthalate
Confidentiality, Type, and Guideline	no; not specified; not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; liquid; NR
Temperature	not reported
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	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	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

Study Citation:	Elsevier, (2019). Reaxys: physical-chemical property data for dibutyl phthalate. CAS Registry Number: 84-74-2..
OECD Harmonized Template:	Dielectric Constant
HERO ID:	5926413

EXTRACTION

Parameter	**Data**
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
Dielectric Constant	6.36
Temperature	25°C
System	Not Reported
Results Value	Not Reported
Results Details	@ 25°C; 6 values were reported in Reaxys; 1 of these values was reported as 6.36 at 25 C; 5 values were outside this range or measured at unreported or non-standard temperatures.

EVALUATION

Domain	Metric		Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured 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	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: French; Singer; Journal of the Chemical Society; (1956); p. 1424,1427

Study Citation:	Rumble, J. R. (2018). Dibutyl phthalate. :3-16.
OECD Harmonized Template:	Dielectric Constant
HERO ID:	5348244

EXTRACTION

Parameter	**Data**
CASRN and Test Material	84-74-2; Dibutyl phthalate
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
Dielectric Constant	6.36
Temperature	25°C
System	Not Reported
Results Value	Not Reported
Results Details	Not Reported

EVALUATION

Domain	Metric		Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured 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	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

Study Citation:	NIST, (2022). NIST Chemistry WebBook: Dibutyl phthalate (84-74-2), Standard Reference Database No. 69.
OECD Harmonized Template:	UV and Visible Absorption
HERO ID:	10225264

EXTRACTION

Parameter	Data
CASRN and Test Material	84-74-2; Not Reported
Confidentiality, Type, and Guideline	No; Experimental; NA
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Wave Length Range	Not Reported
Light Source, Optical Path Length, and Optical Cell Type	Instrument SF-4; Not Reported; Not Reported
Test Concentration and Reference Substance	Not Reported; Not Reported
Solvent and Solvent pH	Not Reported; Not Reported
Blank Control, Maxima, Lambda Max, and Peak Band Width	Not Reported; Not Reported; ~278 (from spectrum); nm
Measured Absolute Value and Molar Coefficient	Not Reported; 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 (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: Citing Fihtengolts, V.S., et al., Atlas of UV Absorption Spectra of Substances Used in Synthetic Rubber Manufacture, 1969, 163.

Study Citation:	Lu, C. (2009). Prediction of environmental properties in water-soil-air systems for phthalates. Bulletin of Environmental Contamination and Toxicology 83(2):168-173.
OECD Harmonized Template:	Other Properties
HERO ID:	807140

EXTRACTION

Parameter	**Data**
CASRN and Test Material	84-74-2; di-n-butyl phthalate
Confidentiality, Type, and Guideline	none; QSAR; Quantitative Structure-Property relationship model for estimation of log Koa
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: DBP
Results Value	Log Koa = 8.45
Results Details	Koa = So/S(A) where So is solubility in octanol and S(A) is the solubility in air
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	N/A	Rating of this factor is not applicable to this kind of information.
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.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	Medium	Modeled data compared well to other data.

Overall Quality Determination Medium

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

Term	Definition
ASTM	American Society for Testing and Materials
ATSDR	Agency for Toxic Substances and Disease Registry
atm	Atmospheres
atm · m^3/mol	Atmospheres - cubic meters per mole
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/cm^3	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: Rijksinstituut voor Volksgezondheid en Milieu)

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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