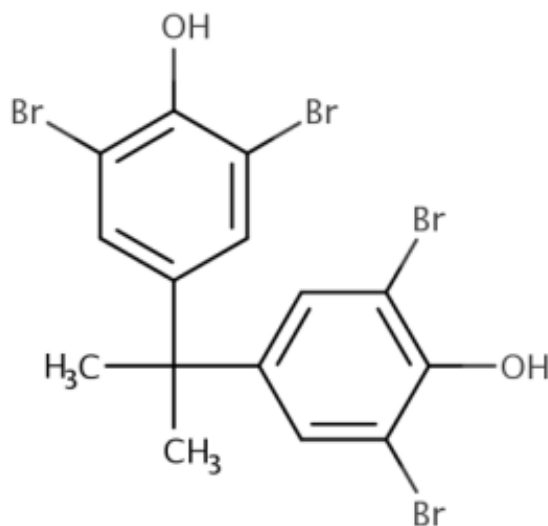

**Draft Data Extraction Information for
General Population, Consumer, and Environmental Exposure for
4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)**

Systematic Review Support Document for the Draft Risk Evaluation

CASRN: 79-94-7



May 2026

This supplemental file contains information regarding the data extraction results for data sources that met the PECO (Population, Exposure, Comparator or Scenario, and Outcomes) screening criteria for the

EPA conducted data quality evaluation and extraction based on author-reported descriptions and results; additional analyses (e.g., statistical analyses) potentially conducted by EPA are not contained in this supplemental file. The data extraction results herein are organized by evidence streams and media types. A reference may contain data for multiple evidence streams and/or media types and will be cited in different tables if appropriate. The media type “All Applicable Media” refers to modeled doses or intakes calculated from human biomonitoring data (e.g., urine, blood, etc.) or when the media specific to the modeled route (e.g., inhalation, oral, etc.) are not clearly defined. In the data extraction results, “POINT VALUE(S)” denotes when the author(s) did not report a minimum, maximum, mean, or any other summary statistics, but rather single reported level(s) (e.g., chemical concentration). Summary statistic values that were less than the analytical limit were substituted with “0,” “ND,” “<LOD,” and “<LOQ,” as reported by the study. For further details about extraction criteria, review the [Draft Systematic Review Protocol for 4,4'-\(1-Methylethylidene\)bis\[2, 6-dibromophenol\] \(TBBPA\)](#).

Acronyms and abbreviations used within this supplemental file are defined in the table at the end of this file. The two letter country codes defined herein are consistent with those used in the searchable International Standardization Organization (ISO) 3166 standard for country codes. Finally, “NR” preceding a country code indicates that the author(s) did not report the city, state and region. This supplemental file may also be referred to as [Draft Data Extraction Information for General Population, Consumer, and Environmental Exposure for 4,4'-\(1-Methylethylidene\)bis\[2, 6-dibromophenol\] \(TBBPA\)](#).

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Ambient Air

Table 1: Data Extraction Tables of Exposure Monitoring Studies for Ambient Air

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Takigami et al. 2009 HERO ID: 198241 <i>OQD:</i> High	Hokkaido, JP Scenario: Outdoor air near homes in Hokkaido, Japan (n = 2; DF = 1; Sampling Period: Oct., 2006 - Nov., 2006)	LOD: Not Reported LOQ: Not Reported	7.1 pg/m ³	9.5 pg/m ³	8.30 pg/m ³ (AM)	NR	NR
Abdallah et al. 2008 HERO ID: 1079114 <i>OQD:</i> High	Birmingham, GB Scenario: Outdoor air at the Elms Road Observatory Site (EROS) (n = 5; DF = NR; Sampling Period: Dec., 2007)	LOD: Not Reported LOQ: 1.8 pg/m ³	<LOQ	<LOQ	<LOQ	50th: <LOQ;	0.1 pg/m ³ (ASD)
Salapasidou et al. 2011 HERO ID: 1249468 <i>OQD:</i> High	Thessaloniki, GR Scenario: Ambient PM10 at urban-traffic site in Thessaloniki, Greece (n = 10; DF = 0.7; Sampling Period: Jan., 2007 - Feb., 2007)	LOD: Not Reported LOQ: Not Reported	<LOD	0.77 ng/m ³	0.25 ng/m ³ (AM)	50th: 0.19 ng/m ³ ;	0.26 ng/m ³ (ASD)
Salapasidou et al. 2011 HERO ID: 1249468 <i>OQD:</i> High	Thessaloniki, GR Scenario: Ambient PM10 at urban-industrial site in Thessaloniki, Greece (n = 10; DF = 0.6; Sampling Period: Jan., 2007 - Feb., 2007)	LOD: Not Reported LOQ: Not Reported	<LOD	2.58 ng/m ³	0.65 ng/m ³ (AM)	50th: 0.012 ng/m ³ ;	1.14 ng/m ³ (ASD)
Saito et al. 2007 HERO ID: 1927779 <i>OQD:</i> Medium	Tokyo, JP Scenario: Outdoor air from 8 sites (n = 8; DF = 0; Sampling Period: Jan., 2002 - Mar., 2002)	LOD: 1.2 ng/m ³ LOQ: Not Reported	NR	NR	ND	NR	NR
Moreau-Guigon et al. 2016 HERO ID: 3470397 <i>OQD:</i> Medium	Paris, FR Scenario: Outdoor air during non-heating season (n = 6; DF = 0; Sampling Period: Sept., 2011 - Nov., 2011)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Moreau-Guigon et al. 2016 HERO ID: 3470397 <i>OQD:</i> Medium	Paris, FR Scenario: Outdoor air during heating season (n = 6; DF = 0; Sampling Period: Jan., 2012 - Mar., 2012)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR

4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Aquatic Species

Table 2: Data Extraction Tables of Exposure Monitoring Studies for Aquatic Species

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Lankova et al. 2013 HERO ID: 1927544 <i>OQD:</i> High	Spain (Mediterranean and Atlantic Ocean), Denmark, Baltic Sea, Pacific Ocean, Norwegian sea, Vietnam, Norway, France, Scotland, Germany, Czechia, Netherlands, Peru, CZ Scenario: Wild caught and aquaculture bivalve from European markets - blue mussel (n = 4; DF = 0; Sampling Period: 2013)	LOD: Not Reported LOQ: 0.5 µg/kg	NR	<LOQ	NR	NR	NR
Lankova et al. 2013 HERO ID: 1927544 <i>OQD:</i> High	Spain (Mediterranean and Atlantic Ocean), Denmark, Baltic Sea, Pacific Ocean, Norwegian sea, Vietnam, Norway, France, Scotland, Germany, Czechia, Netherlands, Peru, CZ Scenario: Wild caught bivalve from European markets - clam (n = 1; DF = 0; Sampling Period: 2013)	LOD: Not Reported LOQ: 0.5 µg/kg	NR	<LOQ	NR	NR	NR
Lankova et al. 2013 HERO ID: 1927544 <i>OQD:</i> High	Spain (Mediterranean and Atlantic Ocean), Denmark, Baltic Sea, Pacific Ocean, Norwegian sea, Vietnam, Norway, France, Scotland, Germany, Czechia, Netherlands, Peru, CZ Scenario: Wild caught fish from European markets - Blue whiting (n = 1; DF = 0; Sampling Period: 2013)	LOD: Not Reported LOQ: 0.5 µg/kg	NR	<LOQ	NR	NR	NR
Lankova et al. 2013 HERO ID: 1927544 <i>OQD:</i> High	Spain (Mediterranean and Atlantic Ocean), Denmark, Baltic Sea, Pacific Ocean, Norwegian sea, Vietnam, Norway, France, Scotland, Germany, Czechia, Netherlands, Peru, CZ Scenario: Wild caught fish from European markets - Cod (n = 4; DF = 0; Sampling Period: 2013)	LOD: Not Reported LOQ: 0.5 µg/kg	NR	<LOQ	NR	NR	NR
Lankova et al. 2013 HERO ID: 1927544 <i>OQD:</i> High	Spain (Mediterranean and Atlantic Ocean), Denmark, Baltic Sea, Pacific Ocean, Norwegian sea, Vietnam, Norway, France, Scotland, Germany, Czechia, Netherlands, Peru, CZ Scenario: Wild caught fish from European markets - Herring (n = 8; DF = 0; Sampling Period: 2013)	LOD: Not Reported LOQ: 0.5 µg/kg	NR	<LOQ	NR	NR	NR
Lankova et al. 2013 HERO ID: 1927544 <i>OQD:</i> High	Spain (Mediterranean and Atlantic Ocean), Denmark, Baltic Sea, Pacific Ocean, Norwegian sea, Vietnam, Norway, France, Scotland, Germany, Czechia, Netherlands, Peru, CZ Scenario: Wild caught fish from European markets - Mack-erel (n = 2; DF = 0; Sampling Period: 2013)	LOD: Not Reported LOQ: 0.5 µg/kg	NR	<LOQ	NR	NR	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Aquatic Species

Table 2 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Lankova et al. 2013 HERO ID: 1927544 OQD: High	Spain (Mediterranean and Atlantic Ocean), Denmark, Baltic Sea, Pacific Ocean, Norwegian sea, Vietnam, Norway, France, Scotland, Germany, Czechia, Netherlands, Peru, CZ Scenario: Aquaculture fish from European markets - Pangasius (n = 4; DF = 0; Sampling Period: 2013)	LOD: Not Reported LOQ: 0.5 µg/kg	NR	<LOQ	NR	NR	NR
Lankova et al. 2013 HERO ID: 1927544 OQD: High	Spain (Mediterranean and Atlantic Ocean), Denmark, Baltic Sea, Pacific Ocean, Norwegian sea, Vietnam, Norway, France, Scotland, Germany, Czechia, Netherlands, Peru, CZ Scenario: Aquaculture fish from European markets - Salmon (n = 5; DF = 0; Sampling Period: 2013)	LOD: Not Reported LOQ: 0.5 µg/kg	NR	<LOQ	NR	NR	NR
Lankova et al. 2013 HERO ID: 1927544 OQD: High	Spain (Mediterranean and Atlantic Ocean), Denmark, Baltic Sea, Pacific Ocean, Norwegian sea, Vietnam, Norway, France, Scotland, Germany, Czechia, Netherlands, Peru, CZ Scenario: Wild caught and aquaculture fish from European markets - Trout (n = 7; DF = 0; Sampling Period: 2013)	LOD: Not Reported LOQ: 0.5 µg/kg	NR	<LOQ	NR	NR	NR
Lankova et al. 2013 HERO ID: 1927544 OQD: High	Spain (Mediterranean and Atlantic Ocean), Denmark, Baltic Sea, Pacific Ocean, Norwegian sea, Vietnam, Norway, France, Scotland, Germany, Czechia, Netherlands, Peru, CZ Scenario: Wild caught fish from European markets- Whiting (n = 1; DF = 0; Sampling Period: 2013)	LOD: Not Reported LOQ: 0.5 µg/kg	NR	<LOQ	NR	NR	NR
Evenset et al. 2009 HERO ID: 6992056 OQD: Medium	Svalbard, NO Scenario: Fish liver from Arctic Ocean (Atlantic cod, polar cod, artic char) (n = 11; DF = 0; Sampling Period: Summer, 2004 - Summer, 2008)	LOD: 3.3 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Evenset et al. 2009 HERO ID: 6992056 OQD: Medium	Svalbard, NO Scenario: Whole fish from Arctic Ocean (Atlantic cod, polar cod, artic char) (n = 5; DF = 0; Sampling Period: Summer, 2004 - Summer, 2008)	LOD: 0.47 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Evenset et al. 2009 HERO ID: 6992056 OQD: Medium	Svalbard, NO Scenario: Fish muscle from Arctic Ocean (Atlantic cod, polar cod, artic char) (n = 5; DF = 0; Sampling Period: Summer, 2004 - Summer, 2008)	LOD: 0.43 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Aquatic Species

Table 2 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Green et al. 2021 HERO ID: 7002448 <i>OQD:</i> Medium	Inner Oslo Fjord, NO Scenario: liver of wild cod caught by local fisherman in the Inner Oslo Fjord (n = 12; DF = 0; Sampling Period: Aug., 2017 - Jan., 2018)	LOD: Not Reported LOQ: 0.5 ng/g	NR	NR	<LOQ	NR	NR
Green et al. 2021 HERO ID: 7002448 <i>OQD:</i> Medium	Stathelle area, Langesundfjord, NO Scenario: liver of wild cod caught by local fisherman in the Stathelle area, Langesundfjord (n = 15; DF = 0; Sampling Period: Aug., 2017 - Jan., 2018)	LOD: Not Reported LOQ: 0.5 ng/g	NR	NR	<LOQ	NR	NR
Green et al. 2021 HERO ID: 7002448 <i>OQD:</i> Medium	Bømlo, Outer Selbjørnfjord, NO Scenario: liver of wild cod caught by local fisherman in the Bømlo, Outer Selbjørnfjord (n = 13; DF = 0; Sampling Period: Aug., 2017 - Jan., 2018)	LOD: Not Reported LOQ: 0.5 ng/g	NR	NR	<LOQ	NR	NR
Norwegian Environment Agency et al. 2019 HERO ID: 7002468 <i>OQD:</i> High	Lake Mjøsa, Lake Femunden, NO Scenario: Zooplankton from Lake Mjøsa in 2018 (n = 3; DF = 0; Sampling Period: May, 2018)	LOD: 0.5 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Norwegian Environment Agency et al. 2019 HERO ID: 7002468 <i>OQD:</i> High	Lake Mjøsa, Lake Femunden, NO Scenario: Mysis from Lake Mjøsa in 2018 (n = 3; DF = 0; Sampling Period: May, 2018)	LOD: 0.5 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Norwegian Environment Agency et al. 2019 HERO ID: 7002468 <i>OQD:</i> High	Lake Mjøsa, Lake Femunden, NO Scenario: E. Smelt from Lake Mjøsa in 2018 (n = 10; DF = 0; Sampling Period: May, 2018)	LOD: 0.5 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Norwegian Environment Agency et al. 2019 HERO ID: 7002468 <i>OQD:</i> High	Lake Mjøsa, Lake Femunden, NO Scenario: Vendace from Lake Mjøsa in 2018 (n = 10; DF = 0; Sampling Period: May, 2018)	LOD: 0.5 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Norwegian Environment Agency et al. 2019 HERO ID: 7002468 <i>OQD:</i> High	Lake Mjøsa, Lake Femunden, NO Scenario: Brown trout from Lake Mjøsa in 2018 (n = 15; DF = 0; Sampling Period: May, 2018)	LOD: 0.5 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Norwegian Environment Agency et al. 2019 HERO ID: 7002468 <i>OQD:</i> High	Lake Mjøsa, Lake Femunden, NO Scenario: Brown trout from Lake Femunden in 2018 (n = 10; DF = 0; Sampling Period: May, 2018)	LOD: 0.5 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Hloučková et al. 2013 HERO ID: 1927549 <i>OQD:</i> High	Czech Rivers, Czech Republic, CZ Scenario: Freshwater fish muscle tissue from Czech aquatic ecosystems (n = 48; DF = 0.23; Sampling Period: Aug., 2010 - Oct., 2010)	LOD: Not Reported LOQ: 0.13 µg/kg	0.14 µg/kg	4.43 µg/kg	1.29 µg/kg (AM)	50th: 0.46 µg/kg;	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Aquatic Species

Table 2 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Harrad et al. 2009 HERO ID: 1927694 <i>OQD:</i> High	England, GB Scenario: Fish from 9 English lakes (n = 30; DF = 0.13; Sampling Period: Jul., 2008 - Aug., 2008)	LOD: Not Reported LOQ: 0.29 ng/g	<LOQ	1.7 ng/g	NR	NR	NR
Svihlikova et al. 2015 HERO ID: 2851070 <i>OQD:</i> High	Hluboká nad Vltavou; Podolí, Praha (Prague); Sedlec, Praha (Prague); Verdek; Hradec Králové; Obříství; Ústí nad Labem; Děčín; Trmice, CZ Scenario: Fish samples from the upper Labe River basin (n = 59; DF = .15; Sampling Period: Jul., 2010)	LOD: Not Reported LOQ: 0.03 ng/g	4.99 ng/g	203 ng/g	60.8 ng/g (AM)	50th: 19.2 ng/g;	NR
Luigi et al. 2015 HERO ID: 2919854 <i>OQD:</i> High	Northern Italy, IT Scenario: Sanders from Site D in the River Po in Italy. (n = 1; DF = 1; Sampling Period: 2014)	LOD: 0.011 ng/g LOQ: Not Reported	Point Value: 0.7 ng/g				
Luigi et al. 2015 HERO ID: 2919854 <i>OQD:</i> High	Northern Italy, IT Scenario: Breams from Site D in the River Po in Italy. (n = 2; DF = 1; Sampling Period: 2014)	LOD: 0.011 ng/g LOQ: Not Reported	Point Value: 15.4 ng/g ; Point Value: 6.9 ng/g				
Luigi et al. 2015 HERO ID: 2919854 <i>OQD:</i> High	Northern Italy, IT Scenario: Common carps from Site D in the River Po in Italy. (n = 4; DF = 0.5; Sampling Period: 2014)	LOD: 0.011 ng/g LOQ: Not Reported	Point Value: 0.5 ng/g ; Point Value: 0.3 ng/g				
Luigi et al. 2015 HERO ID: 2919854 <i>OQD:</i> High	Northern Italy, IT Scenario: Sheatfishes from Site D in the River Po in Italy. (n = 3; DF = 0.67; Sampling Period: 2014)	LOD: 0.011 ng/g LOQ: Not Reported	Point Value: 1.6 ng/g ; Point Value: 0.8 ng/g				
Aznar-Alemaný et al. 2016 HERO ID: 3454553 <i>OQD:</i> Medium	Mediterranean Sea, North Sea, north-east Atlantic Ocean, Pacific Ocean, Indian Ocean, DK,FR,GR,IN,IE,IT,NL,PT,ES Scenario: Raw monkfish from various water bodies. (n = 4; DF = 0.5; Sampling Period: Apr., 2014 - Jan., 2015)	LOD: 0.84 ng/g LOQ: 2.8 ng/g	NR	48.6 ng/g	24.5 ng/g (AM)	NR	NR
Kotthoff et al. 2017 HERO ID: 3864819 <i>OQD:</i> High	Lake Belau, DE Scenario: Bream from Lake Belau (n = 15; DF = NR; Sampling Period: 2007 - 2013)	LOD: 0.1 µg/kg LOQ: 0.45 µg/kg	NR	NR	<LOQ	NR	NR
Kotthoff et al. 2017 HERO ID: 3864819 <i>OQD:</i> High	River estuary site Scheldt, NL Scenario: Bream from Western Scheldt (n = 15; DF = NR; Sampling Period: 2007 - 2013)	LOD: 0.1 µg/kg LOQ: 0.45 µg/kg	NR	NR	<LOQ	NR	NR
Kotthoff et al. 2017 HERO ID: 3864819 <i>OQD:</i> High	River estuary site Scheldt, NL Scenario: Sole from Western Scheldt (n = 15; DF = NR; Sampling Period: 2007 - 2013)	LOD: 0.1 µg/kg LOQ: 0.45 µg/kg	NR	NR	68.0 µg/kg (AM)	NR	NR
Kotthoff et al. 2017 HERO ID: 3864819 <i>OQD:</i> High	River estuary of River Mersey, GB Scenario: Bream from River Mersey (n = 15; DF = NR; Sampling Period: 2007 - 2013)	LOD: 0.1 µg/kg LOQ: 0.45 µg/kg	NR	NR	<LOQ	NR	NR
Kotthoff et al. 2017 HERO ID: 3864819 <i>OQD:</i> High	River estuary of River Götaälv, SE Scenario: Bream from River Götaälv (n = 15; DF = NR; Sampling Period: 2007 - 2013)	LOD: 0.1 µg/kg LOQ: 0.45 µg/kg	NR	NR	<LOQ	NR	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Aquatic Species

Table 2 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Kotthoff et al. 2017 HERO ID: 3864819 <i>OQD:</i> High	River estuary of River Rhone, FR Scenario: Bream from River Rhone (n = 15; DF = NR; Sampling Period: 2007 - 2013)	LOD: 0.1 μg/kg LOQ: 0.45 μg/kg	NR	NR	33.5 μg/kg (AM)	NR	NR
Kotthoff et al. 2017 HERO ID: 3864819 <i>OQD:</i> High	River estuary of River Tees, GB Scenario: Bream from River Tees (n = 15; DF = NR; Sampling Period: 2007 - 2013)	LOD: 0.1 μg/kg LOQ: 0.45 μg/kg	NR	NR	<LOQ	NR	NR
Choo et al. 2019 HERO ID: 5546563 <i>OQD:</i> Medium	KR Scenario: Biota samples of benthic invertebrate species from bottom layer of seawater (n = 6; DF = 0.5; Sampling Period: Jan., 2016 - Feb., 2016)	LOD: 0.014 ng/g LOQ: Not Reported	ND	ND	NR	50th: 1.43 ng/g;	NR
Choo et al. 2019 HERO ID: 5546563 <i>OQD:</i> Medium	KR Scenario: Biota samples of demersal fish species from bottom layer of seawater (n = 6; DF = 0.5; Sampling Period: Jan., 2016 - Feb., 2016)	LOD: 0.014 ng/g LOQ: Not Reported	ND	4.47 ng/g	NR	50th: 0.103 ng/g;	NR
Choo et al. 2019 HERO ID: 5546563 <i>OQD:</i> Medium	KR Scenario: Biota samples of pelagic fish species from surface seawater (n = 8; DF = 1; Sampling Period: Jan., 2016 - Feb., 2016)	LOD: 0.014 ng/g LOQ: Not Reported	1.31 ng/g	11.3 ng/g	NR	50th: 5.42 ng/g;	NR
Gebbink et al. 2019 HERO ID: 5637438 <i>OQD:</i> Medium	Wageningen Marine Research Center, Ijmuiden, NL Scenario: Wild caught marine haddock samples taken from fish stock assessment surveys and fishermen (n = 5; DF = 0.2; Sampling Period: 2009 - 2014)	LOD: Not Reported LOQ: 0.2 ng/g	NR	0.063 ng/g	NR	NR	NR

4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Dietary

Table 3: Data Extraction Tables of Exposure Monitoring Studies for Dietary

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Ashizuka et al. 2008 HERO ID: 2152581 <i>OQD:</i> Medium	Nagoya; Seto Inland Sea; Kyushu, JP Scenario: Pollutant levels in fish samples from Nagoya market (n = 15; DF = .53; Sampling Period: Oct., 2004 - Feb., 2005)	LOD: 0.01 ng/g LOQ: Not Reported	<LOD	0.04 ng/g	0.01 ng/g (AM)	10th: <LOD; 50th: 0.01 ng/g; 75th: <LOD; 90th: 0.036 ng/g;	0.01 ng/g (ASD)
Ashizuka et al. 2008 HERO ID: 2152581 <i>OQD:</i> Medium	Nagoya; Seto Inland Sea; Kyushu, JP Scenario: Pollutant levels in fish samples from Seto Inland market (n = 15; DF = .53; Sampling Period: Oct., 2004 - Feb., 2005)	LOD: 0.01 ng/g LOQ: Not Reported	<LOD	0.1 ng/g	0.01 ng/g (AM)	10th: <LOD; 50th: 0.01 ng/g; 75th: <LOD; 90th: 0.026 ng/g;	NR
Ashizuka et al. 2008 HERO ID: 2152581 <i>OQD:</i> Medium	Nagoya; Seto Inland Sea; Kyushu, JP Scenario: Pollutant levels in fish samples from Kyushu market (n = 15; DF = .87; Sampling Period: Oct., 2004 - Feb., 2005)	LOD: 0.01 ng/g LOQ: Not Reported	<LOD	0.11 ng/g	0.02 ng/g (AM)	10th: <LOD; 50th: 0.02 ng/g; 75th: 0.01 ng/g; 90th: 0.036 ng/g;	NR
Fernandes et al. 2016 HERO ID: 3350498 <i>OQD:</i> Medium	GB Scenario: Eggs (n = 21; DF = NR; Sampling Period: 2013)	LOD: 0.01 ng/g LOQ: Not Reported	<LOD	NR	NR	NR	NR
Fernandes et al. 2016 HERO ID: 3350498 <i>OQD:</i> Medium	GB Scenario: Fish (n = 36; DF = NR; Sampling Period: 2013)	LOD: 0.01 ng/g LOQ: Not Reported	<LOD	0.03 ng/g	0.01 ng/g (AM)	50th: 0.01 ng/g;	NR
Fernandes et al. 2016 HERO ID: 3350498 <i>OQD:</i> Medium	GB Scenario: Processed Meat (n = 17; DF = NR; Sampling Period: 2013)	LOD: 0.01 ng/g LOQ: Not Reported	<LOD	NR	NR	NR	NR
Fernandes et al. 2016 HERO ID: 3350498 <i>OQD:</i> Medium	GB Scenario: Dairy Products (n = 13; DF = NR; Sampling Period: 2013)	LOD: 0.01 ng/g LOQ: Not Reported	<LOD	NR	NR	NR	NR
Fernandes et al. 2016 HERO ID: 3350498 <i>OQD:</i> Medium	GB Scenario: Milk (n = 3; DF = NR; Sampling Period: 2013)	LOD: 0.01 ng/g LOQ: Not Reported	<LOD	NR	NR	NR	NR
Fernandes et al. 2016 HERO ID: 3350498 <i>OQD:</i> Medium	GB Scenario: Shellfish (n = 20; DF = NR; Sampling Period: 2013)	LOD: 0.01 ng/g LOQ: Not Reported	<LOD	0.05 ng/g	0.02 ng/g (AM)	50th: 0.01 ng/g;	NR
Fernandes et al. 2016 HERO ID: 3350498 <i>OQD:</i> Medium	GB Scenario: Meat (n = 14; DF = NR; Sampling Period: 2013)	LOD: 0.01 ng/g LOQ: Not Reported	<LOD	0.02 ng/g	NR	NR	NR
Fernandes et al. 2016 HERO ID: 3350498 <i>OQD:</i> Medium	GB Scenario: Offal (n = 20; DF = NR; Sampling Period: 2013)	LOD: 0.01 ng/g LOQ: Not Reported	<LOD	0.02 ng/g	NR	NR	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Dietary

Table 3 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Fernandes et al. 2016 HERO ID: 3350498 <i>OQD:</i> Medium	GB Scenario: Processed Foods (n = 7; DF = NR; Sampling Period: 2013)	LOD: 0.01 ng/g LOQ: Not Reported	<LOD	0.15 ng/g	NR	NR	NR
Fernandes et al. 2016 HERO ID: 3350498 <i>OQD:</i> Medium	GB Scenario: Other Foods (n = 5; DF = NR; Sampling Period: 2013)	LOD: 0.01 ng/g LOQ: Not Reported	<LOD	NR	NR	NR	NR
Garcia Lopez et al. 2018 HERO ID: 5016905 <i>OQD:</i> Medium	IE Scenario: Fish (oily) concentrations throughout Ireland (n = 6; DF = 0.17; Sampling Period: Jul., 2015 - Dec., 2015)	LOD: <0.01 - 0.01 µg/kg LOQ: Not Reported	0.01 µg/kg	0.01 µg/kg	0.01 µg/kg (AM)	NR	NR
RiviÅre et al. 2019 HERO ID: 5412462 <i>OQD:</i> Medium	FR Scenario: TBBPA in infant-specific foods: growing-up milk (n = 9; DF = 1; Sampling Period: Jan., 2005 - Mar., 2005)	LOD: 0.2-3700 pg/g LOQ: 0.2-3700 pg/g	6.79 ng/g	75.0 ng/g	21.7 ng/g (GM)	NR	21.2 ng/g (ASD)
RiviÅre et al. 2019 HERO ID: 5412462 <i>OQD:</i> Medium	FR Scenario: TBBPA in infant-specific foods: vegetable-based ready-to-eat meal (n = 20; DF = 0.10; Sampling Period: Jan., 2005 - Mar., 2005)	LOD: 0.2-3700 pg/g LOQ: 0.2-3700 pg/g	6.45 ng/g	14.7 ng/g	10.4 ng/g (GM)	NR	1.91 ng/g (ASD)
RiviÅre et al. 2019 HERO ID: 5412462 <i>OQD:</i> Medium	FR Scenario: TBBPA in infant-specific foods: meat/fish-based ready-to-eat meal (n = 45; DF = 0.09; Sampling Period: Jan., 2005 - Mar., 2005)	LOD: 0.2-3700 pg/g LOQ: 0.2-3700 pg/g	7.08 ng/g	141.0 ng/g	12.7 ng/g (GM)	NR	19.8 ng/g (ASD)
RiviÅre et al. 2019 HERO ID: 5412462 <i>OQD:</i> Medium	FR Scenario: TBBPA in infant-specific foods: infant formula (n = 28; DF = 0.61; Sampling Period: Jan., 2005 - Mar., 2005)	LOD: 0.2-3700 pg/g LOQ: 0.2-3700 pg/g	7.34 ng/g	321.0 ng/g	48.6 ng/g (GM)	NR	73.1 ng/g (ASD)
RiviÅre et al. 2019 HERO ID: 5412462 <i>OQD:</i> Medium	FR Scenario: TBBPA in infant-specific foods: follow-on formula (n = 33; DF = 0.73; Sampling Period: Jan., 2005 - Mar., 2005)	LOD: 0.2-3700 pg/g LOQ: 0.2-3700 pg/g	9.12 ng/g	581.0 ng/g	60.1 ng/g (GM)	NR	113.8 ng/g (ASD)
RiviÅre et al. 2019 HERO ID: 5412462 <i>OQD:</i> Medium	FR Scenario: TBBPA in common foods: chocolate (n = 2; DF = 0.50; Sampling Period: Jan., 2005 - Mar., 2005)	LOD: 0.2-3700 pg/g LOQ: 0.2-3700 pg/g	60.6 ng/g	63.2 ng/g	61.9 ng/g (GM)	NR	1.86 ng/g (ASD)
RiviÅre et al. 2019 HERO ID: 5412462 <i>OQD:</i> Medium	FR Scenario: TBBPA in common foods: mixed dishes (n = 4; DF = 0.25; Sampling Period: Jan., 2005 - Mar., 2005)	LOD: 0.2-3700 pg/g LOQ: 0.2-3700 pg/g	18.3 ng/g	31.7 ng/g	26.9 ng/g (GM)	NR	5.93 ng/g (ASD)
RiviÅre et al. 2019 HERO ID: 5412462 <i>OQD:</i> Medium	FR Scenario: TBBPA in common foods: fish (n = 3; DF = 0.333; Sampling Period: Jan., 2005 - Mar., 2005)	LOD: 0.2-3700 pg/g LOQ: 0.2-3700 pg/g	16.6 ng/g	21.4 ng/g	18.4 ng/g (GM)	NR	2.63 ng/g (ASD)

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Dietary

Table 3 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Rivi�re et al. 2019 HERO ID: 5412462 OQD: Medium	FR Scenario: TBBPA in common foods: poultry and game (n = 2; DF = 0.50; Sampling Period: Jan., 2005 - Mar., 2005)	LOD: 0.2-3700 pg/g LOQ: 0.2-3700 pg/g	23.3 ng/g	83.8 ng/g	53.6 ng/g (GM)	NR	42.8 ng/g (ASD)
Rivi�re et al. 2019 HERO ID: 5412462 OQD: Medium	FR Scenario: TBBPA in common foods: croissant-like pastries (n = 1; DF = 1; Sampling Period: Jan., 2005 - Mar., 2005)	LOD: 0.2-3700 pg/g LOQ: 0.2-3700 pg/g	913.64 ng/g	NR	914.0 ng/g (GM)	NR	NR
Rivi�re et al. 2019 HERO ID: 5412462 OQD: Medium	FR Scenario: TBBPA in common foods: meat (n = 2; DF = 0.50; Sampling Period: Jan., 2005 - Mar., 2005)	LOD: 0.2-3700 pg/g LOQ: 0.2-3700 pg/g	21.4 ng/g	29.3 ng/g	25.4 ng/g (GM)	NR	5.6 ng/g (ASD)
Vel Nisseau et al. 2018 HERO ID: 5519480 OQD: High	FR Scenario: Fish from throughout France (n = 114; DF = 0.45; Sampling Period: 2014 - 2016)	LOD: Not Reported LOQ: 0.1 ng/g	<LOD	68.0 pg/g	NR	50th: <LOD;	NR
Vel Nisseau et al. 2018 HERO ID: 5519480 OQD: High	FR Scenario: Crustaceous/molluscs from throughout France (n = 154; DF = 0.60; Sampling Period: 2014 - 2016)	LOD: Not Reported LOQ: 0.1 ng/g	<LOD	26.0 pg/g	NR	50th: 0.6 pg/g;	NR
Vel Nisseau et al. 2018 HERO ID: 5519480 OQD: High	FR Scenario: Milk from throughout France (n = 72; DF = 0.17; Sampling Period: 2014 - 2016)	LOD: Not Reported LOQ: 0.1 ng/g	<LOD	2.7 pg/g	NR	50th: <LOD;	NR
Vel Nisseau et al. 2018 HERO ID: 5519480 OQD: High	FR Scenario: Eggs from throughout France (n = 57; DF = 0.26; Sampling Period: 2014 - 2016)	LOD: Not Reported LOQ: 0.1 ng/g	<LOD	5.66 pg/g	NR	50th: <LOD;	NR
Vel Nisseau et al. 2018 HERO ID: 5519480 OQD: High	FR Scenario: Sheep liver from throughout France (n = 28; DF = 0.50; Sampling Period: 2014 - 2016)	LOD: Not Reported LOQ: 0.1 ng/g	<LOD	22.76 pg/g	NR	50th: 0.079 pg/g;	NR
Vel Nisseau et al. 2018 HERO ID: 5519480 OQD: High	FR Scenario: Meat from throughout France (n = 152; DF = 0.37; Sampling Period: 2014 - 2016)	LOD: Not Reported LOQ: 0.1 ng/g	<LOD	17.73 pg/g	NR	50th: <LOD;	NR
Poma et al. 2018 HERO ID: 5519714 OQD: High	BE Scenario: Edible portions of fish and fish products purchased from various food vendors (n = 61; DF = 0.033; Sampling Period: 2015 - 2016)	LOD: Not Reported LOQ: 0.01-0.025 ng/g	<LOQ	39.0 pg/g	0.79 pg/g (AM)	50th: <LOQ;	5.11 pg/g (ASD)
Poma et al. 2018 HERO ID: 5519714 OQD: High	BE Scenario: Edible portions of meat and meat products purchased from various food vendors (n = 35; DF = 0.029; Sampling Period: 2015 - 2016)	LOD: Not Reported LOQ: 0.01-0.025 ng/g	NR	<LOQ	3.0 pg/g (AM)	25th: <LOQ; 50th: <LOQ; 75th: <LOQ; 90th: <LOQ;	16.0 pg/g (ASD)
Gebbink et al. 2019 HERO ID: 5637438 OQD: Medium	NL Scenario: Bovine meat samples from Dutch slaughterhouses (n = 13; DF = 0.08; Sampling Period: 2009 - 2014)	LOD: Not Reported LOQ: 0.1 ng/g	NR	0.1 ng/g	NR	NR	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Dietary

Table 3 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Gebbink et al. 2019 HERO ID: 5637438 <i>OQD:</i> Medium	NL Scenario: Chicken meat samples taken from broiler operations (n = 15; DF = 0.067; Sampling Period: 2009 - 2014)	LOD: Not Reported LOQ: 0.1 ng/g	NR	0.054 ng/g	NR	NR	NR

4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Dust (Indoor)

Table 4: Data Extraction Tables of Exposure Monitoring Studies for Dust (Indoor)

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Batterman et al. 2010 HERO ID: 1010575 <i>OQD:</i> High	Ann Arbor, Michigan, US Scenario: Dust (n = 12; DF = 1.0; Sampling Period: May, 2006 - Nov., 2007)	LOD: Not Reported LOQ: Not Reported	NR	NR	223 $\mu\text{g/g}$ (AM)	50th: 134 $\mu\text{g/g}$;	NR
Di Napoli-Davis et al. 2013 HERO ID: 2550601 <i>OQD:</i> Medium	US Scenario: Dust from surfaces of a copier (n = 5; DF = 1.0; Sampling Period: 2013)	LOD: Not Reported LOQ: 10.0 ng/mL	NR	NR	<LOQ	NR	NR
Di Napoli-Davis et al. 2013 HERO ID: 2550601 <i>OQD:</i> Medium	US Scenario: Dust from surfaces of a PC tower (n = 5; DF = 1.0; Sampling Period: 2013)	LOD: Not Reported LOQ: 10.0 ng/mL	NR	NR	<LOQ	NR	NR
Di Napoli-Davis et al. 2013 HERO ID: 2550601 <i>OQD:</i> Medium	US Scenario: Dust from surfaces of a microwave (n = 5; DF = 1.0; Sampling Period: 2013)	LOD: Not Reported LOQ: 10.0 ng/mL	NR	NR	206 ng/mL (AM)	NR	NR
Di Napoli-Davis et al. 2013 HERO ID: 2550601 <i>OQD:</i> Medium	US Scenario: Dust from surfaces of a refrigerator (n = 5; DF = 1.0; Sampling Period: 2013)	LOD: Not Reported LOQ: 10.0 ng/mL	NR	NR	194 ng/mL (AM)	NR	NR
Di Napoli-Davis et al. 2013 HERO ID: 2550601 <i>OQD:</i> Medium	US Scenario: Dust from surfaces of a computer monitor (n = 5; DF = 1.0; Sampling Period: 2013)	LOD: Not Reported LOQ: 10.0 ng/mL	NR	NR	523 ng/mL (AM)	NR	NR
Di Napoli-Davis et al. 2013 HERO ID: 2550601 <i>OQD:</i> Medium	US Scenario: Dust from surfaces of a printer (n = 4; DF = 1.0; Sampling Period: 2013)	LOD: Not Reported LOQ: 10.0 ng/mL	NR	NR	183 ng/mL (AM)	NR	NR
Takigami et al. 2009 HERO ID: 198241 <i>OQD:</i> High	Hokkaido, JP Scenario: Vacuum dust samples from homes in Hokkaido, Japan (n = 2; DF = 1; Sampling Period: Oct., 2006 - Nov., 2006)	LOD: Not Reported LOQ: Not Reported	490 ng/g	520 ng/g	505.00 ng/g (AM)	NR	NR
Abb et al. 2011 HERO ID: 787629 <i>OQD:</i> Medium	Bavaria; Hesse; Lower Saxony; Saxony-Anhalt; Saxony; Denver, CO, DE,US Scenario: House dust collected with vacuum cleaner bags. (n = 26; DF = NR; Sampling Period: 2010)	LOD: 11 ng/g LOQ: Not Reported	ND	470 ng/g	86 ng/g (AM)	50th: 48 ng/g;	NR
Harrad et al. 2010 HERO ID: 1076646 <i>OQD:</i> Medium	West Midlands, GB Scenario: Dust vacuumed from floors in daycares and primary school classrooms (n = 43; DF = 1; Sampling Period: winter, 2007 - Spring, 2008)	LOD: Not Reported LOQ: Not Reported	17 ng/g	1400 ng/g	200 ng/g (AM)	5th: 20 ng/g; 50th: 110 ng/g; 95th: 460 ng/g;	NR
Abdallah et al. 2008 HERO ID: 1079114 <i>OQD:</i> High	Birmingham, GB Scenario: Dust in homes within the West Midlands conurbation (n = 35; DF = 0.97; Sampling Period: Sept., 2006 - Jun., 2007)	LOD: Not Reported LOQ: 0.05 ng/g	<LOQ	382 ng/g	87 ng/g (AM)	50th: 62 ng/g;	71 ng/g (ASD)

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Dust (Indoor)

Table 4 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Abdallah et al. 2008 HERO ID: 1079114 OQD: High	Birmingham, GB Scenario: Dust in offices within the West Midlands conurbation (n = 28; DF = 0.86; Sampling Period: Sept., 2006 - Jun., 2007)	LOD: Not Reported LOQ: 0.05 ng/g	<LOQ	140 ng/g	49 ng/g (AM)	50th: 36 ng/g;	46 ng/g (ASD)
Abdallah et al. 2008 HERO ID: 1079114 OQD: High	Birmingham, GB Scenario: Dust in cars within the West Midlands conurbation (n = 20; DF = 0.50; Sampling Period: Sept., 2006 - Jun., 2007)	LOD: Not Reported LOQ: 0.05 ng/g	<LOQ	25 ng/g	6 ng/g (AM)	50th: 2 ng/g;	8 ng/g (ASD)
Abdallah et al. 2008 HERO ID: 1079114 OQD: High	Birmingham, GB Scenario: Dust in public microenvironments (PMEs) within the West Midlands conurbation (n = 4; DF = 1; Sampling Period: Sept., 2006 - Jun., 2007)	LOD: Not Reported LOQ: 0.05 ng/g	52 ng/g	350 ng/g	220 ng/g (AM)	50th: 230 ng/g;	140 ng/g (ASD)
D'Hollander et al. 2010 HERO ID: 1578505 OQD: High	Flanders, BE Scenario: Dust from offices in Flanders (n = 1; DF = NR; Sampling Period: 2008)	LOD: Not Reported LOQ: 3.0 ng/g	NR	NR	NR	50th: 70.4 ng/g; 95th: 212 ng/g;	NR
D'Hollander et al. 2010 HERO ID: 1578505 OQD: High	Flanders, BE Scenario: Dust from houses in Flanders (n = 1; DF = NR; Sampling Period: 2008)	LOD: Not Reported LOQ: 3.0 ng/g	NR	NR	NR	50th: 11.7 ng/g; 95th: 141 ng/g;	NR
Takigami et al. 2008 HERO ID: 1927735 OQD: Medium	JP Scenario: Dust from inside CRT TVs (n = 5; DF = 1; Sampling Period: 2007)	LOD: Not Reported LOQ: Not Reported	5.5 µg/g	680 µg/g	240 µg/g (AM)	NR	NR
Stapleton et al. 2014 HERO ID: 2343712 OQD: High	North Carolina, US Scenario: Dust from hardwood and carpeted floors of 30 homes (n = 30; DF = 0.76; Sampling Period: Spring, 2012)	LOD: 0.2 ng/g LOQ: Not Reported	<LOD	245 ng/g	7.9 ng/g (GM)	NR	NR
Schreder et al. 2014 HERO ID: 2528320 OQD: High	Longview, WA; Vancouver, WA, US Scenario: Household dust from the primary living areas in 20 homes (n = 20; DF = .95; Sampling Period: 2011 - 2012)	LOD: 1.0 ng/g LOQ: Not Reported	<LOD	6560 ng/g	1010 ng/g (AM)	50th: 209 ng/g;	NR
La Guardia et al. 2015 HERO ID: 3012534 OQD: Medium	Seattle, WA, US Scenario: Settled dust from 4 gyms (n = 4; DF = 1; Sampling Period: 2013)	LOD: 0.1 µg/g LOQ: Not Reported	NR	NR	0.68 µg/g (AM)	NR	NR
Wang et al. 2015 HERO ID: 3021171 OQD: Medium	Hanoi, Ha Tinh, HungYen, Thai Binh, VN Scenario: Public area dust samples from 12 countries (n = 8; DF = 0.1; Sampling Period: 2010 - 2014)	LOD: 0.1 ng/g LOQ: 1.0 ng/g	<LOQ	28 ng/g	7.3 ng/g (AM)	50th: <LOQ;	NR
Wang et al. 2015 HERO ID: 3021171 OQD: Medium	Hanoi, Ha Tinh, HungYen, Thai Binh, VN Scenario: Indoor dust samples from homes in 12 countries (n = 12; DF = 0.5; Sampling Period: 2010 - 2014)	LOD: 0.1 ng/g LOQ: 1.0 ng/g	<LOQ	630 ng/g	36 ng/g (AM)	50th: 11 ng/g;	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Dust (Indoor)

Table 4 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Wang et al. 2015 HERO ID: 3021171 <i>OQD:</i> Medium	Hanoi, Ha Tinh, HungYen, Thai Binh, VN Scenario: E-waste workshop dust samples from 12 countries (n = 4; DF = 0.1; Sampling Period: 2010 - 2014)	LOD: 0.1 ng/g LOQ: 1.0 ng/g	23 ng/g	3600 ng/g	1700 ng/g (AM)	50th: 1600 ng/g;	NR
Wang et al. 2015 HERO ID: 3021171 <i>OQD:</i> Medium	Kuwait, KW Scenario: Microenvironment dust samples from 12 countries (n = 15; DF = 0.87; Sampling Period: 2010 - 2014)	LOD: 0.1 ng/g LOQ: 1.0 ng/g	<LOQ	40 ng/g	8.4 ng/g (AM)	50th: 6.7 ng/g;	NR
Wang et al. 2015 HERO ID: 3021171 <i>OQD:</i> Medium	Jeddah, SA Scenario: Air conditioner samples from 12 countries (n = 12; DF = 0.67; Sampling Period: 2010 - 2014)	LOD: 0.1 ng/g LOQ: 1.0 ng/g	<LOQ	220 ng/g	54 ng/g (AM)	50th: 27 ng/g;	NR
Wang et al. 2015 HERO ID: 3021171 <i>OQD:</i> Medium	Jeddah, SA Scenario: Car samples from 12 countries (n = 10; DF = 0.80; Sampling Period: 2010 - 2014)	LOD: 0.1 ng/g LOQ: 1.0 ng/g	<LOQ	160 ng/g	32 ng/g (AM)	50th: 11 ng/g;	NR
Wang et al. 2015 HERO ID: 3021171 <i>OQD:</i> Medium	Ansan, Anyang, KR Scenario: Laboratory dust samples in 12 countries (n = 11; DF = 0.1; Sampling Period: 2010 - 2014)	LOD: 0.1 ng/g LOQ: 1.0 ng/g	9.2 ng/g	360 ng/g	120 ng/g (AM)	50th: 220 ng/g;	NR
Wang et al. 2015 HERO ID: 3021171 <i>OQD:</i> Medium	Ansan, Anyang, KR Scenario: Office dust samples in 12 countries (n = 14; DF = 0.1; Sampling Period: 2010 - 2014)	LOD: 0.1 ng/g LOQ: 1.0 ng/g	2.4 ng/g	3300 ng/g	160 ng/g (AM)	50th: 13 ng/g;	NR
Wang et al. 2015 HERO ID: 3021171 <i>OQD:</i> Medium	Faisalabad, PK Scenario: Car dust samples in 12 countries (n = 6; DF = 0.1; Sampling Period: 2010 - 2014)	LOD: 0.1 ng/g LOQ: 1.0 ng/g	3.8 ng/g	52 ng/g	26 ng/g (AM)	50th: 28 ng/g;	NR
Besis et al. 2017 HERO ID: 3860936 <i>OQD:</i> High	Thessaloniki, GR Scenario: Dust from interior surfaces of passenger cars built from 1997 to 2015 in Thessaloniki, Greece (n = 25; DF = .16; Sampling Period: 2016)	LOD: Not Reported LOQ: 10.0 ng/g	<LOQ	1064 ng/g	44.8 ng/g (AM)	NR	NR
Larsson et al. 2018 HERO ID: 4292136 <i>OQD:</i> High	Stockholm, SE Scenario: Dust from preschool playroom area (n = 99; DF = 0.96; Sampling Period: Feb., 2015 - Nov., 2015)	LOD: 2.1 ng/g LOQ: Not Reported	<LOD	3500 ng/g	88 ng/g (GM)	50th: 65 ng/g; 95th: 1200 ng/g;	NR
Kweon et al. 2018 HERO ID: 5043550 <i>OQD:</i> High	Seoul; Kyung-gi Province, KR Scenario: Dust from residential homes (n = 42; DF = <1; Sampling Period: 2017)	LOD: 28 ng/g LOQ: Not Reported	<LOD	2092 ng/g	213 ng/g (AM)	50th: 69 ng/g;	NR
Giovanoulis et al. 2019 HERO ID: 5412073 <i>OQD:</i> High	Stockholm, SE Scenario: Dust from 20 preschools (n = 20; DF = 0.80; Sampling Period: Jan., 2018 - Feb., 2018)	LOD: 0.02 μg/g LOQ: Not Reported	NR	NR	NR	50th: 0.134 μg/g; 95th: 1.61 μg/g;	NR
Abdallah et al. 2016 HERO ID: 5519202 <i>OQD:</i> High	Annecy, FR Scenario: Indoor dust from homes in France. (n = 9; DF = NR; Sampling Period: Aug., 2008 - Oct., 2008)	LOD: 0.06 ng/g LOQ: Not Reported	NR	NR	59 ng/g (AM)	5th: 15 ng/g; 50th: 44 ng/g; 95th: 130 ng/g;	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Dust (Indoor)

Table 4 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Abdallah et al. 2016 HERO ID: 5519202 <i>OQD:</i> High	Annecy, FR Scenario: Indoor dust from offices in France. (n = 11; DF = NR; Sampling Period: Aug., 2008 - Oct., 2008)	LOD: 0.06 ng/g LOQ: Not Reported	NR	NR	327 ng/g (AM)	5th: 49 ng/g; 50th: 197 ng/g; 95th: 1124 ng/g;	NR
Abdallah et al. 2016 HERO ID: 5519202 <i>OQD:</i> High	Annecy, FR Scenario: Indoor dust from cars in France. (n = 7; DF = NR; Sampling Period: Aug., 2008 - Oct., 2008)	LOD: 0.06 ng/g LOQ: Not Reported	NR	NR	43 ng/g (AM)	5th: 10 ng/g; 50th: 47 ng/g; 95th: 64 ng/g;	NR
Abdallah et al. 2016 HERO ID: 5519202 <i>OQD:</i> High	Almaty and Astana, KZ Scenario: Indoor dust from homes in Kazakhstan. (n = 10; DF = NR; Sampling Period: May, 2009 - Jun., 2009)	LOD: 0.06 ng/g LOQ: Not Reported	NR	NR	22 ng/g (AM)	5th: <0.06 ng/g; 50th: 13 ng/g; 95th: 69 ng/g;	NR
Abdallah et al. 2016 HERO ID: 5519202 <i>OQD:</i> High	Almaty and Astana, KZ Scenario: Indoor dust from offices in Kazakhstan. (n = 10; DF = NR; Sampling Period: May, 2009 - Jun., 2009)	LOD: 0.06 ng/g LOQ: Not Reported	NR	NR	9 ng/g (AM)	5th: <0.06 ng/g; 50th: 4 ng/g; 95th: 27 ng/g;	NR
Abdallah et al. 2016 HERO ID: 5519202 <i>OQD:</i> High	Almaty and Astana, KZ Scenario: Indoor dust from cars in Kazakhstan. (n = 11; DF = NR; Sampling Period: May, 2009 - Jun., 2009)	LOD: 0.06 ng/g LOQ: Not Reported	NR	NR	1 ng/g (AM)	5th: <0.06 ng/g; 50th: <0.06 ng/g; 95th: 4 ng/g;	NR
Abdallah et al. 2016 HERO ID: 5519202 <i>OQD:</i> High	Lagos, NG Scenario: Indoor dust from homes in Nigeria. (n = 10; DF = NR; Sampling Period: Sept., 2014 - Oct., 2014)	LOD: 0.06 ng/g LOQ: Not Reported	NR	NR	56 ng/g (AM)	5th: 23 ng/g; 50th: 50 ng/g; 95th: 107 ng/g;	NR
Abdallah et al. 2016 HERO ID: 5519202 <i>OQD:</i> High	Lagos, NG Scenario: Indoor dust from offices in Nigeria. (n = 10; DF = NR; Sampling Period: Sept., 2014 - Oct., 2014)	LOD: 0.06 ng/g LOQ: Not Reported	NR	NR	43 ng/g (AM)	5th: <0.06 ng/g; 50th: 30 ng/g; 95th: 114 ng/g;	NR
Abdallah et al. 2016 HERO ID: 5519202 <i>OQD:</i> High	Lagos, NG Scenario: Indoor dust from cars in Nigeria. (n = 10; DF = NR; Sampling Period: Sept., 2014 - Oct., 2014)	LOD: 0.06 ng/g LOQ: Not Reported	NR	NR	2 ng/g (AM)	5th: <0.06 ng/g; 50th: <0.06 ng/g; 95th: 6 ng/g;	NR
Lankova et al. 2015 HERO ID: 5737901 <i>OQD:</i> Medium	Prague, CZ Scenario: Indoor dust from homes in Prague (n = 18; DF = 0.11; Sampling Period: Mar., 2013)	LOD: Not Reported LOQ: 2.5 ng/g	<LOQ	269 ng/g	NR	NR	NR
Shin et al. 2019 HERO ID: 6968217 <i>OQD:</i> Medium	Northern California, US Scenario: Living room dust from 38 homes (n = 38; DF = 0.95; Sampling Period: May, 2015 - Aug., 2016)	LOD: <100 ng/g LOQ: Not Reported	ND	NR	NR	25th: <LOD; 50th: <LOD; 75th: <LOD; 95th: <LOD;	1.05 ng/g (CV)

4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Human Biomonitoring

Table 5: Data Extraction Tables of Exposure Monitoring Studies for Human Biomonitoring

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Carignan et al. 2012 HERO ID: 1927577 <i>OQD:</i> High	Boston, MA, US Scenario: TBBP-A in breastmilk from Boston mothers (n = 43; DF = 0.35; Sampling Period: Apr., 2004 - Jan., 2005)	LOD: Not Reported LOQ: 30.0 pg/g	<LOQ	550 pg/g	NR	NR	NR
Kim et al. 2014 HERO ID: 2324769 <i>OQD:</i> High	Seoul, South Korea, KR Scenario: Sera from infants with Congenital Hypothyroidism in Seoul (n = 26; DF = 0.85; Sampling Period: Nov., 2009 - May, 2010)	LOD: 0.072 ng/g LOQ: Not Reported	<LOD	713 ng/g	83.0 ng/g (AM)	NR	1.99 ng/g (ASD)
Kim et al. 2014 HERO ID: 2324769 <i>OQD:</i> High	Seoul, South Korea, KR Scenario: Sera from healthy Infants in Seoul (n = 12; DF = 0.83; Sampling Period: Nov., 2009 - Apr., 2010)	LOD: 0.072 µg/g LOQ: Not Reported	<LOD	457.4 ng/g	72.5 ng/g (AM)	NR	2.18 ng/g (ASD)
Kim et al. 2014 HERO ID: 2324769 <i>OQD:</i> High	Seoul, South Korea, KR Scenario: Sera from mothers of Infants with Congenital Hypothyroidism in Seoul (n = 26; DF = 0.81; Sampling Period: Nov., 2009 - Apr., 2010)	LOD: 0.072 ng/g LOQ: Not Reported	<LOD	48.25 ng/g	8.61 ng/g (AM)	NR	1.64 ng/g (ASD)
Kim et al. 2014 HERO ID: 2324769 <i>OQD:</i> High	Seoul, South Korea, KR Scenario: Sera from mothers of Healthy Infants in Seoul (n = 12; DF = 0.83; Sampling Period: Nov., 2009 - Apr., 2010)	LOD: 0.072 ng/g LOQ: Not Reported	<LOD	74.0 ng/g	10.7 ng/g (AM)	NR	2.05 ng/g (ASD)
Abdallah et al. 2011 HERO ID: 787631 <i>OQD:</i> Medium	Birmingham, GB Scenario: Breastmilk samples from adult healthy volunteers in the UK (n = 34; DF = 0.36; Sampling Period: 2009)	LOD: Not Reported LOQ: 22 pg/g	<LOD	0.65 ng/g	0.06 ng/g (AM)	5th: <LOD; 50th: <LOD; 95th: 0.24 ng/g;	0.13 ng/g (ASD)
Antignac et al. 2008 HERO ID: 787643 <i>OQD:</i> Medium	Toulouse, FR Scenario: Breast milk from French women following birth (n = 23; DF = 1; Sampling Period: Mar., 2005 - Sept., 2005)	LOD: Not Reported LOQ: Not Reported	34 Other	9400 Other	NR	50th: 172 Other;	NR
Antignac et al. 2008 HERO ID: 787643 <i>OQD:</i> Medium	Toulouse, FR Scenario: Maternal serum from French women following birth (n = 26; DF = 1; Sampling Period: Mar., 2005 - Sept., 2005)	LOD: Not Reported LOQ: Not Reported	Average: 54 Other				
Antignac et al. 2008 HERO ID: 787643 <i>OQD:</i> Medium	Toulouse, FR Scenario: Cord serum following birth (n = 26; DF = 1; Sampling Period: Mar., 2005 - Sept., 2005)	LOD: Not Reported LOQ: Not Reported	Average: 152 Other				
Kawashiro et al. 2008 HERO ID: 1408306 <i>OQD:</i> Medium	Kashiwa, Japan, JP Scenario: Maternal blood samples from healthy mothers in Japan (n = 6; DF = 0.67; Sampling Period: Nov., 2005 - Dec., 2006)	LOD: Not Reported LOQ: 9 pg/g	<LOQ	100 pg/g	26 pg/g (AM)	50th: 17 pg/g;	38 pg/g (ASD)

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Human Biomonitoring

Table 5 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Kawashiro et al. 2008 HERO ID: 1408306 <i>OQD:</i> Medium	Kashiwa, Japan, JP Scenario: Umbilical cord samples from infants in Japan (n = 6; DF = 1; Sampling Period: Nov., 2005 - Dec., 2006)	LOD: Not Reported LOQ: 2 pg/g	10 pg/g	24 pg/g	16 pg/g (AM)	50th: 15 pg/g;	5.5 pg/g (ASD)
Fujii et al. 2014 HERO ID: 2149393 <i>OQD:</i> High	Kyoto, Kyoto Prefecture, JP Scenario: Human serum samples from the Kyoto University Human Specimen Bank collected in 1989 (n = 20; DF = 0.05; Sampling Period: 1989)	LOD: Not Reported LOQ: 50 pg/g	<LOQ	940 pg/g	NR	NR	NR
Fujii et al. 2014 HERO ID: 2149393 <i>OQD:</i> High	Kyoto, Kyoto Prefecture, JP Scenario: Human serum samples from the Kyoto University Human Specimen Bank collected in 1999 (n = 60; DF = 0.28; Sampling Period: 1999)	LOD: Not Reported LOQ: 50 pg/g	<LOQ	950 pg/g	NR	NR	NR
Cariou et al. 2008 HERO ID: 2156366 <i>OQD:</i> Medium	Toulouse, FR Scenario: Breastmilk of women in France (n = 77; DF = 0.44; Sampling Period: Nov., 2004 - Sept., 2006)	LOD: Not Reported LOQ: Not Reported	0.06 ng/g	37.34 ng/g	4.11 ng/g (AM)	50th: 0.48 ng/g;	7.58 ng/g (ASD)
Cariou et al. 2008 HERO ID: 2156366 <i>OQD:</i> Medium	Toulouse, FR Scenario: Maternal serum of women in France (n = 91; DF = 0.32; Sampling Period: Nov., 2004 - Sept., 2006)	LOD: Not Reported LOQ: Not Reported	0.23 ng/g	93.22 ng/g	19.87 ng/g (AM)	50th: 16.14 ng/g;	24.15 ng/g (ASD)
Cariou et al. 2008 HERO ID: 2156366 <i>OQD:</i> Medium	Toulouse, FR Scenario: Cord serum of infants in France (n = 90; DF = 0.30; Sampling Period: Nov., 2004 - Sept., 2006)	LOD: Not Reported LOQ: Not Reported	2.09 ng/g	649.45 ng/g	103.52 ng/g (AM)	50th: 54.76 ng/g;	149.73 ng/g (ASD)
Stapleton et al. 2014 HERO ID: 2343712 <i>OQD:</i> High	North Carolina, US Scenario: Handwipes from both hands (n = 30; DF = 0.70; Sampling Period: Spring, 2012)	LOD: 0.02 ng/sample LOQ: Not Reported	<LOD	35.0 ng/sample	0.4 ng/sample (GM)	NR	NR
Lankova et al. 2013 HERO ID: 2343724 <i>OQD:</i> High	Olomouc region, CZ Scenario: Human breast milk from Czech women (n = 50; DF = 0.30; Sampling Period: Apr., 2010 - Aug., 2010)	LOD: 2 ng/g LOQ: Not Reported	<LOD	688 ng/g	NR	NR	NR
Fujii et al. 2014 HERO ID: 2818993 <i>OQD:</i> High	Okinawa, JP Scenario: Breast milk from Japanese women (n = 9; DF = 1; Sampling Period: 2005 - 2006)	LOD: 1-200 pg/g LOQ: Not Reported	1.04 ng/g	2.22 ng/g	1.04 ng/g (AM)	50th: 0.72 ng/g;	0.65 ng/g (ASD)
Fujii et al. 2014 HERO ID: 2818993 <i>OQD:</i> High	Okinawa, JP Scenario: Serum from Japanese women (n = 10; DF = 0.3; Sampling Period: 2006)	LOD: 1-200 pg/g LOQ: Not Reported	<LOQ	238 pg/g	40.5 pg/g (AM)	50th: 1 pg/g;	78 pg/g (ASD)
Harrad et al. 2015 HERO ID: 3350532 <i>OQD:</i> High	Birmingham, GB Scenario: Breastmilk from women in the UK (n = 120; DF = 0.61; Sampling Period: 2010 - 2011)	LOD: 50 pg/g LOQ: Not Reported	NR	NR	0.06 ng/g (AM)	5th: 0.03 ng/g; 50th: 0.04 ng/g; 95th: 0.17 ng/g;	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Human Biomonitoring

Table 5 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Akiyama et al. 2015 HERO ID: 3350557 ‡ <i>OQD:</i> High <i>MoBBPA, 2,6-DiBBPA, 2,2'-DiBBPA, TriBBPA, TeBBPA</i>	Osaka prefecture, JP Scenario: Breastmilk one month after delivery (n = 12; DF = 0.5; Sampling Period: 2011 - 2013)	LOD: Not Reported LOQ: 0.2 Other	0.00674 ng/mL	0.344 ng/mL	0.0644 ng/mL (GM)	10th: 0.00975 ng/mL; 25th: 0.0183 ng/mL; 50th: 0.0333 ng/mL; 75th: 0.063775 ng/mL; 90th: 0.09805 ng/mL;	0.09 ng/mL (ASD)
Ho et al. 2017 HERO ID: 3843987 <i>OQD:</i> Medium	Hong Kong SAR, China, CN Scenario: Human plasma sample collection from 140 voluntary donors in Southern China (n = 10; DF = 0.929; Sampling Period: Apr., 2012 - Aug., 2012)	LOD: 0.005 ng/g LOQ: Not Reported	ND	7.49 ng/mL	3.82 ng/mL (GM)	NR	NR
Ho et al. 2017 HERO ID: 3843987 <i>OQD:</i> Medium	Hong Kong SAR, China, CN Scenario: Human urine sample collection from 140 voluntary donors in Southern China (n = 10; DF = 0.886; Sampling Period: Apr., 2012 - Aug., 2012)	LOD: Not Reported LOQ: Not Reported	ND	88.41 µg/g	0.23 µg/g (GM)	NR	NR
Dufour et al. 2017 HERO ID: 3983917 <i>OQD:</i> High	Province of Liege, BE Scenario: Blood sample (without gel) in 274 people (n = 274; DF = 0.31; Sampling Period: Feb., 2015 - May, 2015)	LOD: Not Reported LOQ: 4.1 Other	<LOQ	43.6 pg/ml	<LOQ	50th: <LOQ;	NR
Larsson et al. 2018 HERO ID: 4292136 <i>OQD:</i> High	Stockholm, SE Scenario: Handwipes from preschool children (n = 100; DF = 0.97; Sampling Period: 2015)	LOD: 42 pg/sample LOQ: 140 pg/sample	<LOD	130000 pg/sample	540 pg/sample (GM)	50th: 360 pg/sample; 95th: 13000 pg/sample;	NR
Inthavong et al. 2017 HERO ID: 5016975 <i>OQD:</i> High	Paris, FR Scenario: Mature breast milk samples from the Institut de Puericulture et de Périnatalogie de Paris milk bank (n = 106; DF = 0.42; Sampling Period: 2010)	LOD: 0.5 ng/g LOQ: 2.5 ng/g	0.5 ng/g	15 ng/g	3.5 ng/g (AM)	NR	NR
Rivi�re et al. 2019 HERO ID: 5412462 <i>OQD:</i> Medium	FR Scenario: Dietary exposure to TBBPA among French infants 7-12 months old (n = Not Reported; DF = NR; Sampling Period: Jan., 2005 - Mar., 2005)	LOD: 0.2-3700 pg/g LOQ: 0.2-3700 pg/g	NR	NR	3.28 ng/kg (GM)	90th: 8.39 ng/kg;	5.02 ng/kg (ASD)
Rivi�re et al. 2019 HERO ID: 5412462 <i>OQD:</i> Medium	FR Scenario: Dietary exposure to TBBPA among French infants 13-36 months old (n = Not Reported; DF = NR; Sampling Period: Jan., 2005 - Mar., 2005)	LOD: 0.2-3700 pg/g LOQ: 0.2-3700 pg/g	NR	NR	0.968 ng/kg (GM)	90th: 1.80 ng/kg;	0.794 ng/kg (ASD)
Rivi�re et al. 2019 HERO ID: 5412462 <i>OQD:</i> Medium	FR Scenario: Dietary exposure to TBBPA among French infants 1-4 months old (n = Not Reported; DF = NR; Sampling Period: Jan., 2005 - Mar., 2005)	LOD: 0.2-3700 pg/g LOQ: 0.2-3700 pg/g	NR	NR	9.94 ng/kg (GM)	90th: 31.3 ng/kg;	12.72 ng/kg (ASD)

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Human Biomonitoring

Table 5 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Riviere et al. 2019 HERO ID: 5412462 <i>OQD:</i> Medium	FR Scenario: Dietary exposure to TBBPA among French infants 5-6 months old (n = Not Reported; DF = NR; Sampling Period: Jan., 2005 - Mar., 2005)	LOD: 0.2-3700 pg/g LOQ: 0.2-3700 pg/g	NR	NR	5.60 ng/kg (GM)	90th: 16.3 ng/kg;	9.37 ng/kg (ASD)
Fujii et al. 2018 HERO ID: 5549543 <i>OQD:</i> High	Miyagi;Hyogo;Nagasaki;Tokyo;Gifu;Kyoto, JP Scenario: Breastmilk from healthy mothers (n = 64; DF = .97; Sampling Period: 2008 - 2010)	LOD: Not Reported LOQ: 34 pg/g	<LOQ	2200 ng/g	48 ng/g (AM); 3.0 ng/g (GM)	50th: 3.2 ng/g;	280 ng/g (ASD)
Barghi et al. 2018 HERO ID: 5550302 <i>OQD:</i> High	Pohang, KR Scenario: Hair samples from men, women, and children in South Korea (n = 24; DF = NR; Sampling Period: Feb., 2017 - Apr., 2017)	LOD: 0.15 ng/g LOQ: Not Reported	ND	16.04 ng/g	5.00 ng/g (AM)	NR	NR
Barghi et al. 2018 HERO ID: 5550302 <i>OQD:</i> High	Noor City, IR Scenario: Hair samples from adult women in Iran (n = 15; DF = NR; Sampling Period: Feb., 2017 - Apr., 2017)	LOD: 0.15 ng/g LOQ: Not Reported	ND	1.08 ng/g	0.23 ng/g (AM)	NR	NR
Kicinski et al. 2012 HERO ID: 5635880 <i>OQD:</i> Medium	Flanders, BE Scenario: Blood from Flemish adolescents. (n = 515; DF = NR; Sampling Period: 2008 - 2011)	LOD: Not Reported LOQ: 15 ng/L	NR	186 ng/L	NR	95th: 22 ng/L;	NR

‡ Data extraction results are for metabolite concentrations.

4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Indoor Air

Table 6: Data Extraction Tables of Exposure Monitoring Studies for Indoor Air

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Batterman et al. 2010 HERO ID: 1010575 <i>OQD:</i> High	Ann Arbor, Michigan, US Scenario: Vapor (n = 18; DF = 0.56; Sampling Period: May, 2006 - Nov., 2007)	LOD: Not Reported LOQ: Not Reported	NR	NR	12 pg/m ³ (AM)	50th: <LOD;	NR
Batterman et al. 2010 HERO ID: 1010575 <i>OQD:</i> High	Ann Arbor, Michigan, US Scenario: PM (n = 13; DF = 0.31; Sampling Period: May, 2006 - Nov., 2007)	LOD: Not Reported LOQ: Not Reported	NR	NR	<LOD	50th: <LOD;	NR
Takigami et al. 2009 HERO ID: 198241 <i>OQD:</i> High	Hokkaido, JP Scenario: Indoor living room air in homes in Hokkaido, Japan (n = 2; DF = 1.0; Sampling Period: Oct., 2006 - Nov., 2006)	LOD: Not Reported LOQ: Not Reported	8 pg/m ³	20 pg/m ³	14.00 pg/m ³ (AM)	NR	NR
Takigami et al. 2009 HERO ID: 198241 <i>OQD:</i> High	Hokkaido, JP Scenario: Indoor bedroom air in homes in Hokkaido, Japan (n = 2; DF = 1.0; Sampling Period: Oct., 2006 - Nov., 2006)	LOD: Not Reported LOQ: Not Reported	10 pg/m ³	12 pg/m ³	11.00 pg/m ³ (AM)	NR	NR
Abdallah et al. 2008 HERO ID: 1079114 <i>OQD:</i> High	Birmingham, GB Scenario: Indoor air in homes within the West Midlands conurbation (n = 5; DF = 1.0; Sampling Period: Feb., 2007 - Dec., 2007)	LOD: Not Reported LOQ: 1.8 pg/m ³	9 pg/m ³	22 pg/m ³	16 pg/m ³ (AM)	50th: 15 pg/m ³ ;	5 pg/m ³ (ASD)
Abdallah et al. 2008 HERO ID: 1079114 <i>OQD:</i> High	Birmingham, GB Scenario: Indoor air in offices within the West Midlands conurbation (n = 5; DF = 1.0; Sampling Period: Feb., 2007 - Dec., 2007)	LOD: Not Reported LOQ: 1.8 pg/m ³	4 pg/m ³	33 pg/m ³	16 pg/m ³ (AM)	50th: 11 pg/m ³ ;	12 pg/m ³ (ASD)
Abdallah et al. 2008 HERO ID: 1079114 <i>OQD:</i> High	Birmingham, GB Scenario: Indoor air in public microenvironments (PMEs) within the West Midlands conurbation (n = 5; DF = 1.0; Sampling Period: Feb., 2007 - Dec., 2007)	LOD: Not Reported LOQ: 1.8 pg/m ³	17 pg/m ³	32 pg/m ³	26 pg/m ³ (AM)	50th: 27 pg/m ³ ;	7 pg/m ³ (ASD)
Saito et al. 2007 HERO ID: 1927779 <i>OQD:</i> Medium	Tokyo, JP Scenario: Indoor air from 18 Houses (n = 18; DF = 0; Sampling Period: Jan., 2002 - Mar., 2002)	LOD: 1.2 ng/m ³ LOQ: Not Reported	NR	ND	NR	NR	NR
Saito et al. 2007 HERO ID: 1927779 <i>OQD:</i> Medium	Tokyo, JP Scenario: Indoor air from 14 offices (n = 14; DF = 0; Sampling Period: Jan., 2002 - Mar., 2002)	LOD: 1.2 ng/m ³ LOQ: Not Reported	NR	ND	NR	NR	NR
Geens et al. 2009 HERO ID: 2095186 <i>OQD:</i> High	Flanders, BE Scenario: Dust samples from homes in Belgium (n = 18; DF = 1.0; Sampling Period: Spring, 2008 - 2008)	LOD: 0.2 ng/g LOQ: Not Reported	0.85 ng/g	1481 ng/g	365 ng/g (AM)	50th: 10 ng/g; 95th: 689 ng/g;	NR
Geens et al. 2009 HERO ID: 2095186 <i>OQD:</i> High	Flanders, BE Scenario: Dust samples from offices in Belgium (n = 2; DF = 1.0; Sampling Period: Spring, 2008 - 2008)	LOD: 0.2 ng/g LOQ: Not Reported	4685 ng/g	8380 ng/g	NR	NR	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Indoor Air

Table 6 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
La Guardia et al. 2015 HERO ID: 3012534 <i>OQD:</i> Medium	Seattle, WA, US Scenario: Indoor air respirable particulates from 4 houses (n = 4; DF = 0; Sampling Period: 2013)	LOD: 0.1 ng/m ³ LOQ: Not Reported	NR	NR	<LOD	NR	NR
La Guardia et al. 2015 HERO ID: 3012534 <i>OQD:</i> Medium	Seattle, WA, US Scenario: Indoor air respirable particulates from 4 gyms (n = 4; DF = 0; Sampling Period: 2013)	LOD: 0.1 ng/m ³ LOQ: Not Reported	NR	NR	<LOD	NR	NR
La Guardia et al. 2015 HERO ID: 3012534 <i>OQD:</i> Medium	Seattle, WA, US Scenario: Indoor air inhalable particulates from 4 houses (n = 4; DF = 0; Sampling Period: 2013)	LOD: 0.1 ng/m ³ LOQ: Not Reported	NR	NR	<LOD	NR	NR
La Guardia et al. 2015 HERO ID: 3012534 <i>OQD:</i> Medium	Seattle, WA, US Scenario: Indoor air inhalable particulates from 4 gyms (n = 4; DF = 0; Sampling Period: 2013)	LOD: 0.1 ng/m ³ LOQ: Not Reported	NR	NR	<LOD	NR	NR
Laborie et al. 2016 HERO ID: 3230514 [‡] <i>OQD:</i> Medium <i>TBBPA</i>	near Paris, FR Scenario: Indoor air (particulate) from an office (n = 3; DF = 1.0; Sampling Period: Summer, 2013)	LOD: 0.37 pg/m ³ LOQ: 1.22 pg/m ³	NR	NR	0.117 ng/m ³ (AM)	NR	0.189 ng/m ³ (ASD)
Laborie et al. 2016 HERO ID: 3230514 <i>OQD:</i> Medium	near Paris, FR Scenario: Indoor air (particulate) from an apartment (n = 3; DF = 1.0; Sampling Period: Summer, 2013)	LOD: 0.37 pg/m ³ LOQ: 1.22 pg/m ³	NR	NR	0.019 ng/m ³ (AM)	NR	0.017 ng/m ³ (ASD)
Laborie et al. 2016 HERO ID: 3230514 <i>OQD:</i> Medium	near Paris, FR Scenario: Indoor air (particulate) from a house (n = 3; DF = 1.0; Sampling Period: Summer, 2013)	LOD: 0.37 pg/m ³ LOQ: 1.22 pg/m ³	NR	NR	0.005 ng/m ³ (AM)	NR	0.005 ng/m ³ (ASD)
Laborie et al. 2016 HERO ID: 3230514 <i>OQD:</i> Medium	near Paris, FR Scenario: Indoor air (particulate) from a day nursery (n = 3; DF = 1.0; Sampling Period: Summer, 2013)	LOD: 0.37 pg/m ³ LOQ: 1.22 pg/m ³	NR	NR	0.009 ng/m ³ (AM)	NR	0.004 ng/m ³ (ASD)
Moreau-Guigon et al. 2016 HERO ID: 3470397 <i>OQD:</i> Medium	Paris, FR Scenario: Office air during non-heating season (n = 6; DF = 0; Sampling Period: Sept., 2011 - Nov., 2011)	LOD: Not Reported LOQ: 38.7-102.6 pg/m ³	NR	NR	ND	NR	NR
Moreau-Guigon et al. 2016 HERO ID: 3470397 <i>OQD:</i> Medium	Paris, FR Scenario: Office air during heating season (n = 6; DF = 0; Sampling Period: Jan., 2012 - Mar., 2012)	LOD: Not Reported LOQ: 38.7-102.6 pg/m ³	NR	NR	ND	NR	NR
Moreau-Guigon et al. 2016 HERO ID: 3470397 <i>OQD:</i> Medium	Paris, FR Scenario: Apartment air during non-heating season (n = 6; DF = 0; Sampling Period: Sept., 2011 - Nov., 2011)	LOD: Not Reported LOQ: 38.7-102.6 pg/m ³	NR	NR	ND	NR	NR
Moreau-Guigon et al. 2016 HERO ID: 3470397 <i>OQD:</i> Medium	Paris, FR Scenario: Apartment air during heating season (n = 6; DF = 0; Sampling Period: Jan., 2012 - Mar., 2012)	LOD: Not Reported LOQ: 38.7-102.6 pg/m ³	NR	NR	ND	NR	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Indoor Air

Table 6 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Moreau-Guigon et al. 2016 HERO ID: 3470397 <i>OQD:</i> Medium	Paris, FR Scenario: Nursery air during non-heating season (n = 6; DF = 0; Sampling Period: Sept., 2011 - Nov., 2011)	LOD: Not Reported LOQ: 38.7-102.6 pg/m ³	NR	NR	ND	NR	NR
Moreau-Guigon et al. 2016 HERO ID: 3470397 <i>OQD:</i> Medium	Paris, FR Scenario: Nursery air during heating season (n = 6; DF = 0; Sampling Period: Jan., 2012 - Mar., 2012)	LOD: Not Reported LOQ: 38.7-102.6 pg/m ³	NR	NR	ND	NR	NR
Tay et al. 2017 HERO ID: 3861571 <i>OQD:</i> Medium	NO Scenario: Indoor stationary air samples from living rooms of households in the Norwegian Cohort (n = 60; DF = 0.65; Sampling Period: Nov., 2013 - Apr., 2014)	LOD: 3.7 pg/m ³ LOQ: 5.7 pg/m ³	<LOD	720 pg/m ³	20 pg/m ³ (GM)	50th: <LOD;	NR
Tay et al. 2017 HERO ID: 3861571 <i>OQD:</i> Medium	NO Scenario: Settled dust from living rooms of households in the Norwegian Cohort (n = 60; DF = 0.97; Sampling Period: Nov., 2013 - Apr., 2014)	LOD: 81.0 Other LOQ: 130 Other	<LOD	10000 ng/g	350 ng/g (GM)	50th: 62 ng/g;	NR

‡ Data extraction results are for metabolite concentrations.

4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Other

Table 7: Data Extraction Tables of Exposure Monitoring Studies for Other

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Brandli et al. 2007 HERO ID: 198168 <i>OQD:</i> Low	Not reported, CH Scenario: Compost from commercial plants (n = 13; DF = 1.0; Sampling Period: 2007)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [1.4 µg/kg; 0.51 µg/kg; 2.3 µg/kg; 1.4 µg/kg; 0.52 µg/kg; 0.57 µg/kg; 0.22 µg/kg; 0.50 µg/kg]				
Brandli et al. 2007 HERO ID: 198168 <i>OQD:</i> Low	Not reported, CH Scenario: Compost from commercial plants in Switzerland (n = 13; DF = 1.0; Sampling Period: 2007)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [0.065 µg/kg; 0.11 µg/kg; 0.36 µg/kg; 0.10 µg/kg; 0.38 µg/kg]				
Brandli et al. 2007 HERO ID: 198168 <i>OQD:</i> Low	Not reported, CH Scenario: Digestate from commercial plants in Switzerland (n = 5; DF = 1.0; Sampling Period: 2007)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [1.5 µg/kg; 0.63 µg/kg; 1.0 µg/kg; 0.44 µg/kg; 0.98 µg/kg]				
Gallistl et al. 2017 HERO ID: 3828894 <i>OQD:</i> High	Stuttgart, DE Scenario: Dishcloths used in private kitchens for 14 days (n = 19; DF = 0.79; Sampling Period: May, 2015 - Jun., 2015)	LOD: 0.73 Other LOQ: 2.2 Other	<LOD	460 Other	110 Other (AM)	50th: 38 Other;	NR
Zheng et al. 2017 HERO ID: 4162077 <i>OQD:</i> Medium	Guangzhou, CN Scenario: Phone dust wipes from 32 volunteers (n = 32; DF = 0.97; Sampling Period: Jun., 2015)	LOD: Not Reported LOQ: 0.03 ng	ND	4.6 pg/cm2	NR	50th: 0.4 pg/cm2;	NR
Zheng et al. 2017 HERO ID: 4162077 <i>OQD:</i> Medium	Guangzhou, CN Scenario: Laptop dust wipes from 32 volunteers (n = 32; DF = 0.91; Sampling Period: Jun., 2015)	LOD: Not Reported LOQ: 0.03 ng	ND	48 pg/cm2	NR	50th: 3.8 pg/cm2;	NR
Takigami et al. 2009 HERO ID: 198241 <i>OQD:</i> High	Hokkaido, JP Scenario: Exhaust air samples from homes in Hokkaido, Japan (n = 2; DF = 1; Sampling Period: Oct., 2006 - Nov., 2006)	LOD: Not Reported LOQ: Not Reported	4.9 pg/m ³	15.0 pg/m ³	9.95 pg/m ³ (AM)	NR	NR
Keller et al. 2014 HERO ID: 3023922 <i>OQD:</i> Medium	North Carolina, US Scenario: Tent wipes collected from 20 different tents. (n = 20; DF = 0.05; Sampling Period: 2013)	LOD: 3.0 Other LOQ: Not Reported	<LOD	13000.0 Other	NR	NR	NR
Fernandes et al. 2016 HERO ID: 3350498 <i>OQD:</i> Medium	GB Scenario: Composite Feeds (n = 18; DF = NR; Sampling Period: 2013)	LOD: 0.01 ng/g LOQ: Not Reported	<LOD	0.16 ng/g	0.05 ng/g (AM)	50th: 0.04 ng/g;	NR
Fernandes et al. 2016 HERO ID: 3350498 <i>OQD:</i> Medium	GB Scenario: Grasses (n = 2; DF = NR; Sampling Period: 2013)	LOD: 0.01 ng/g LOQ: Not Reported	0.06 ng/g	0.1 ng/g	NR	NR	NR
Fernandes et al. 2016 HERO ID: 3350498 <i>OQD:</i> Medium	GB Scenario: Oilseeds and Cereals (n = 18; DF = NR; Sampling Period: 2013)	LOD: 0.01 ng/g LOQ: Not Reported	<LOD	0.18 ng/g	NR	NR	NR
Fernandes et al. 2016 HERO ID: 3350498 <i>OQD:</i> Medium	GB Scenario: Fish Feeds (n = 13; DF = NR; Sampling Period: 2013)	LOD: 0.01 ng/g LOQ: Not Reported	<LOD	0.04 ng/g	0.02 ng/g (AM)	50th: 0.01 ng/g;	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Other

Table 7 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Vel Nisseau et al. 2018 HERO ID: 5519480 <i>OQD:</i> High	FR Scenario: Fish meal from throughout France (n = 15; DF = 0.87; Sampling Period: 2014 - 2016)	LOD: Not Reported LOQ: 0.1 ng/g	<LOD	187.0 pg/g	NR	50th: 12.0 pg/g;	NR
Vel Nisseau et al. 2018 HERO ID: 5519480 <i>OQD:</i> High	FR Scenario: Fish oil from throughout France (n = 15; DF = 0.40; Sampling Period: 2014 - 2016)	LOD: Not Reported LOQ: 0.1 ng/g	<LOD	166.0 pg/g	NR	50th: <LOD;	NR

4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Personal Inhalation

Table 8: Data Extraction Tables of Exposure Monitoring Studies for Personal Inhalation

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Tay et al. 2017 HERO ID: 3861571 <i>OQD:</i> Medium	NO Scenario: Personal air samples from adults within a Norwegian Cohort (n = 13; DF = 0.23; Sampling Period: Nov., 2013 - Apr., 2014)	LOD: 2.7 pg/m ³ LOQ: 8.1 pg/m ³	<LOD	26.0 pg/m ³	<LOQ	50th: <LOD;	NR

4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Sediment

Table 9: Data Extraction Tables of Exposure Monitoring Studies for Sediment

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Evanset et al. 2009 HERO ID: 6992056 <i>OQD:</i> Medium	Svalbard, NO Scenario: Sediment from Arctic Ocean (Hopen area, Smeerenburgfjorden; Kongsfjorden and Liefdefjorden) (n = 7; DF = 1.0; Sampling Period: Summer, 2004 - Summer, 2008)	LOD: 0.62 ng/g LOQ: Not Reported	POINT VALUE(S): [<LOD; <LOD; <LOD; <LOD; <LOD; <LOD; <LOD]				
Norwegian Environment Agency et al. 2019 HERO ID: 7002475 <i>OQD:</i> Medium	Oslo, NO Scenario: Sediment from the inner Oslofjord (n = 1; DF = 0; Sampling Period: 2018)	LOD: 0.09 mg/kg LOQ: Not Reported	POINT VALUE(S): [<LOD]				
Guerra et al. 2010 HERO ID: 1040997 <i>OQD:</i> High	Ebro River, ES Scenario: Sediment from Ebro River (n = 7; DF = 0.57; Sampling Period: 2006 - 2008)	LOD: 2.7 ng/g LOQ: 8.9 ng/g	ND	15 ng/g	4.34 ng/g (AM)	50th: 2.8 ng/g;	4.92 ng/g (ASD)
Harrad et al. 2009 HERO ID: 1927694 <i>OQD:</i> High	England, GB Scenario: Sediment from 9 English lakes (n = 9; DF = 1; Sampling Period: Jul., 2008 - Aug., 2008)	LOD: Not Reported LOQ: Not Reported	330 pg/g	3800 ng/g	NR	NR	NR
Labadie et al. 2010 HERO ID: 2171725 <i>OQD:</i> High	Paris, FR Scenario: Sediment from the Predecelle River at Station 4 (n = 3; DF = NR; Sampling Period: Jun., 2008)	LOD: 50 pg/g LOQ: Not Reported	NR	NR	65 pg/g (AM)	NR	10 pg/g (ASD)
Labadie et al. 2010 HERO ID: 2171725 <i>OQD:</i> High	Paris, FR Scenario: Sediment from the Predecelle River at Station 3 (n = 3; DF = NR; Sampling Period: Jun., 2008)	LOD: 50 pg/g LOQ: Not Reported	NR	NR	130 pg/g (AM)	NR	10 pg/g (ASD)
Labadie et al. 2010 HERO ID: 2171725 <i>OQD:</i> High	Paris, FR Scenario: Sediment from the Predecelle River at Station 5 (n = 3; DF = NR; Sampling Period: Jun., 2008)	LOD: 50 pg/g LOQ: Not Reported	NR	NR	280 pg/g (AM)	NR	20 pg/g (ASD)
Labadie et al. 2010 HERO ID: 2171725 <i>OQD:</i> High	Paris, FR Scenario: Sediment from the Predecelle River at Station 2 (n = 3; DF = NR; Sampling Period: Jun., 2008)	LOD: 50 pg/g LOQ: Not Reported	NR	NR	100 pg/g (AM)	NR	20 pg/g (ASD)
Labadie et al. 2010 HERO ID: 2171725 <i>OQD:</i> High	Paris, FR Scenario: Sediment from the Predecelle River at Station 1 (n = 3; DF = NR; Sampling Period: Jun., 2008)	LOD: 50 pg/g LOQ: Not Reported	NR	NR	140 pg/g (AM)	NR	20 pg/g (ASD)
Hloučková et al. 2014 HERO ID: 2343734 <i>OQD:</i> High	Veltěže; Klecany; Kralupy; Vltavo; Pardubice; Štětí; Trmice; Ústí nad Labem; Liberec; Lampertice; Hůrka; České Budějovice; Polička; Lichnov; Vyškov; Břeclav; Uherské Hradiště, CZ Scenario: Sediments from various rivers from the Czech Republic (n = 31; DF = 0.35; Sampling Period: Jun., 2010 - Dec., 2010)	LOD: 3.0 μg/kg LOQ: Not Reported	3.18 μg/kg	17.7 μg/kg	6.91 μg/kg (AM)	50th: 4.23 μg/kg;	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Sediment

Table 9 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Luigi et al. 2015 HERO ID: 2919854 <i>OQD:</i> High	Northern Italy, IT Scenario: Sediments from Site A of the River Po in Italy. (n = 1; DF = 1; Sampling Period: 2014)	LOD: 0.011 ng/g LOQ: Not Reported	Point Value: 0.067 ng/g				
Luigi et al. 2015 HERO ID: 2919854 <i>OQD:</i> High	Northern Italy, IT Scenario: Sediments from the River Lambro in Italy. (n = 1; DF = 1; Sampling Period: 2014)	LOD: 0.011 ng/g LOQ: Not Reported	Point Value: 1.21 ng/g				
Luigi et al. 2015 HERO ID: 2919854 <i>OQD:</i> High	Northern Italy, IT Scenario: Sediments from Site D of the River Po in Italy. (n = 1; DF = 1; Sampling Period: 2014)	LOD: 0.011 ng/g LOQ: Not Reported	Point Value: 0.076 ng/g				
SÄhring et al. 2015 HERO ID: 3034798 <i>OQD:</i> High	Southern UK coast, GB Scenario: Surface sediments from the southern UK coast (n = 6; DF = 0.87; Sampling Period: Aug., 2012 - Aug., 2013)	LOD: 83 pg/g LOQ: 185 pg/g	NR	NR	1686 pg/g (AM)	NR	870 pg/g (ASD)
SÄhring et al. 2015 HERO ID: 3034798 <i>OQD:</i> High	East Frisian coast, DE Scenario: Surface sediments from the East Frisian coast (n = 6; DF = 0.50 or less; Sampling Period: Aug., 2012 - Aug., 2013)	LOD: 83 pg/g LOQ: 185 pg/g	<LOD	44 pg/g	NR	NR	NR
SÄhring et al. 2015 HERO ID: 3034798 <i>OQD:</i> High	The river Weser and Jadebusen, DE Scenario: Surface sediments from the river Weser and Jadebusen (n = 12; DF = 0.50 or less; Sampling Period: Aug., 2012 - Aug., 2013)	LOD: 83 pg/g LOQ: 185 pg/g	<LOD	281 pg/g	NR	NR	NR
SÄhring et al. 2015 HERO ID: 3034798 <i>OQD:</i> High	North Sea, DE Scenario: Surface sediments from the North Sea (n = 18; DF = 0.50 or less; Sampling Period: Aug., 2012 - Aug., 2013)	LOD: 83 pg/g LOQ: 185 pg/g	<LOD	146 pg/g	NR	NR	NR
SÄhring et al. 2015 HERO ID: 3034798 <i>OQD:</i> High	The river Elbe, DE Scenario: Surface sediments from the river Elbe (n = 7; DF = 0.50 or less; Sampling Period: Aug., 2012 - Aug., 2013)	LOD: 83 pg/g LOQ: 185 pg/g	<LOD	<LOD	NR	NR	NR
SÄhring et al. 2015 HERO ID: 3034798 <i>OQD:</i> High	Northern UK coast, GB Scenario: Surface sediments from the northern UK coast (n = 17; DF = 0.87; Sampling Period: Aug., 2012 - Aug., 2013)	LOD: 83 pg/g LOQ: 185 pg/g	NR	NR	2714 pg/g (AM)	NR	1488 pg/g (ASD)
Liu et al. 2014 HERO ID: 3345121 <i>OQD:</i> Medium	Daya Bay, CN Scenario: Surface sediment from Daya Bay (n = 18; DF = 1; Sampling Period: May, 2012)	LOD: Not Reported LOQ: Not Reported	0.23 ng/g	6.1 ng/g	1.92 ng/g (AM)	10th: 0.311 ng/g; 25th: 0.5075 ng/g; 50th: 1.01 ng/g; 75th: 3.325 ng/g; 90th: 4.28 ng/g;	1.80 ng/g (ASD)

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Sediment

Table 9 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Liu et al. 2014 HERO ID: 3345121 <i>OQD:</i> Medium	Hong Kong, HK Scenario: Surface sediment from Hong Kong (n = 35; DF = 1; Sampling Period: Jun., 2012)	LOD: Not Reported LOQ: Not Reported	0.53 ng/g	9.0 ng/g	2.70 ng/g (AM)	10th: 0.858 ng/g; 25th: 1.35 ng/g; 50th: 2.10 ng/g; 75th: 3.45 ng/g; 90th: 5.38 ng/g;	2.15 ng/g (ASD)
Lee et al. 2015 HERO ID: 3350542 <i>OQD:</i> High	Nakdong River, KR Scenario: Sediment samples from the Nakdong River. (n = 24; DF = NR; Sampling Period: 2009)	LOD: 50 pg/g LOQ: Not Reported	0.55 ng/g	150 ng/g	NR	NR	NR
Kotthoff et al. 2017 HERO ID: 3864819 <i>OQD:</i> High	Lake Belau, DE Scenario: Surface sediment layer from Lake Belau (n = 32; DF = NR; Sampling Period: Winter, 2012 - Winter, 2014)	LOD: 0.1 µg/kg LOQ: 0.45 µg/kg	NR	NR	2.30 µg/kg (AM)	NR	NR
Kotthoff et al. 2017 HERO ID: 3864819 <i>OQD:</i> High	River estuary site Scheldt, NL Scenario: Suspended particulate matter(SPM) from Western Scheldt (n = 16; DF = NR; Sampling Period: Fall, 2007 - Fall, 2013)	LOD: 0.1 µg/kg LOQ: 0.45 µg/kg	NR	NR	<LOQ	NR	NR
Kotthoff et al. 2017 HERO ID: 3864819 <i>OQD:</i> High	River estuary of River Mersey, GB Scenario: Suspended particulate matter(SPM) from River Mersey (n = 4; DF = 0; Sampling Period: Fall, 2007 - Fall, 2008)	LOD: 0.1 µg/kg LOQ: 0.45 µg/kg	NR	NR	9.44 µg/kg (AM)	NR	NR
Kotthoff et al. 2017 HERO ID: 3864819 <i>OQD:</i> High	River estuary of River Götaälv, SE Scenario: Suspended particulate matter(SPM) from River Götaälv (n = 4; DF = NR; Sampling Period: Fall, 2007 - Summer, 2008)	LOD: 0.1 µg/kg LOQ: 0.45 µg/kg	NR	NR	1.99 µg/kg (AM)	NR	NR
Kotthoff et al. 2017 HERO ID: 3864819 <i>OQD:</i> High	River estuary of River Rhone, FR Scenario: Suspended particulate matter(SPM) from River Rhone (n = 16; DF = NR; Sampling Period: Fall, 2007 - Fall, 2014)	LOD: 0.1 µg/kg LOQ: 0.45 µg/kg	NR	NR	3.93 µg/kg (AM)	NR	NR
Kotthoff et al. 2017 HERO ID: 3864819 <i>OQD:</i> High	River estuary of River Tees, GB Scenario: Suspended particulate matter(SPM) from River Tees (n = 16; DF = NR; Sampling Period: Fall, 2007 - Fall, 2014)	LOD: 0.1 µg/kg LOQ: 0.45 µg/kg	NR	NR	3.52 µg/kg (AM)	NR	NR
Zhang et al. 2018 HERO ID: 5427902 <i>OQD:</i> High	Singapore Strait, SG Scenario: HOC concentrations in SPOM (n = 16; DF = 0.44; Sampling Period: 2011 - 2012)	LOD: Not Reported LOQ: Not Reported	NR	NR	1.22 ng/g (GM)	NR	NR
Zhang et al. 2018 HERO ID: 5427902 <i>OQD:</i> High	Singapore Strait, SG Scenario: HOC concentrations in marine sediment (n = 24; DF = 0.75; Sampling Period: 2011 - 2012)	LOD: 0.1-72.7 pg/g LOQ: Not Reported	NR	NR	0.041 ng/g (GM)	NR	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Sediment

Table 9 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Ganci et al. 2019 HERO ID: 5497484 <i>OQD:</i> Medium	England, GB Scenario: Sediments from River Thames (n = 45; DF = 0.98; Sampling Period: Oct., 2011)	LOD: 0.02 μg/kg LOQ: Not Reported	<LOD	2.6 μg/kg	0.6 μg/kg (AM)	50th: 0.6 μg/kg;	NR
Choo et al. 2019 HERO ID: 5546563 <i>OQD:</i> Medium	KR Scenario: Sediment samples taken from bottom layer of sea-water (n = 16; DF = 1; Sampling Period: Jan., 2016 - Feb., 2016)	LOD: Not Reported LOQ: Not Reported	0.035 ng/g	0.538 ng/g	0.18 ng/g (AM)	50th: 0.143 ng/g;	NR

4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Soil

Table 10: Data Extraction Tables of Exposure Monitoring Studies for Soil

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Heimstad et al. 2019 HERO ID: 7002451 <i>OQD:</i> High	Oslo (Dronningparken/Slottsparken, Frogner- seteren/Holmenkollen, Grønmo, Alnabru, VEAS), NO Scenario: Soil samples of terrestrial urban environments (n = 5; DF = 0; Sampling Period: 2018)	LOD: 150 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR

4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Surface Water

Table 11: Data Extraction Tables of Exposure Monitoring Studies for Surface Water

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Norwegian Environment Agency et al. 2019 HERO ID: 7002475 <i>OQD:</i> Medium	Oslo, NO Scenario: Storm water entering the Inner Oslofjord (n = 4; DF = 0; Sampling Period: 2018)	LOD: 0.12 µg/L LOQ: Not Reported	POINT VALUE(S): [<LOD]				
Harrad et al. 2009 HERO ID: 1927694 <i>OQD:</i> High	England, GB Scenario: Particulate and freely-dissolved phases of water samples from 9 English lakes (n = 27; DF = 1; Sampling Period: Jul., 2008 - Aug., 2008)	LOD: 3.4 Other LOQ: Not Reported	NR	NR	1200 pg/L (AM)	NR	81 pg/L (ASD)
Labadie et al. 2010 HERO ID: 2171725 <i>OQD:</i> High	Paris, FR Scenario: Dissolved phase TBBPA in surface water from the Predecelle River (n = 5; DF = 0.6; Sampling Period: Jun., 2008)	LOD: 35.0 pg/L LOQ: 45.0 pg/L	Concentration: 64 pg/L ; Concentration: 50 pg/L ; Concentration: 58 pg/L ; Concentration: <35 pg/L ; Concentration: <35 pg/L				
Labadie et al. 2010 HERO ID: 2171725 <i>OQD:</i> High	Paris, FR Scenario: Particulate phase TBBPA in surface water from the Predecelle River (n = 5; DF = 0; Sampling Period: Jun., 2008)	LOD: 35.0 pg/L LOQ: 45.0 pg/L	Concentration: <35 pg/L ; Concentration: <35 pg/L ; Concentration: <35 pg/L ; Concentration: <35 pg/L ; Concentration: <35 pg/L				
Labadie et al. 2010 HERO ID: 2171725 <i>OQD:</i> High	Paris, FR Scenario: Total TBBPA in surface water from the Predecelle River (n = 5; DF = 0.6; Sampling Period: Jun., 2008)	LOD: 35.0 pg/L LOQ: 45.0 pg/L	Concentration: 64 pg/L ; Concentration: 50 pg/L ; Concentration: 58 pg/L				
Kim et al. 2016 HERO ID: 3545985 <i>OQD:</i> High	Ulsan and Busan, KR Scenario: River near WWTP in Ulsan and Busan (n = nr; DF = NR; Sampling Period: Jun., 2010 - Oct., 2010)	LOD: Not Reported LOQ: Not Reported	35.5 pg/L	814.2 pg/L	431.5 pg/L (AM)	50th: 413.3 pg/L;	184.3 pg/L (ASD)
Gustavsson et al. 2018 HERO ID: 5499542 <i>OQD:</i> High	Eastern coast, SE Scenario: Mouth or lake outlet of 23 rivers with potentially high pollution by flame retardant (n = 28; DF = 0.44; Sampling Period: Oct., 2013)	LOD: 1.3 ng/L LOQ: 4.3 ng/L	<LOD	62 ng/L	29 ng/L (AM)	25th: 15 ng/L; 50th: 27 ng/L; 75th: 37 ng/L;	NR
Choo et al. 2019 HERO ID: 5546563 <i>OQD:</i> Medium	KR Scenario: Surface water samples taken from seawater (n = 16; DF = 0.94; Sampling Period: Jan., 2016 - Feb., 2016)	LOD: Not Reported LOQ: Not Reported	0 pg/L	2793 pg/L	819 pg/L (AM)	50th: 356 pg/L;	NR

Monitoring

Terrestrial Species

Table 12: Data Extraction Tables of Exposure Monitoring Studies for Terrestrial Species

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Evenset et al. 2009 HERO ID: 6992056 OQD: Medium	Svalbard, NO Scenario: Seabird liver from Arctic Ocean (Kittiwakes and common eiders) (n = 14; DF = 1.0; Sampling Period: Summer, 2004 - Summer, 2008)	LOD: 4.1 ng/g LOQ: Not Reported	POINT VALUE(S): [<LOD; <LOD; <LOD; <LOD; <LOD; <LOD; <LOD; <LOD; <LOD; <LOD; <LOD; <LOD; <LOD; <LOD]				
Heimstad et al. 2019 HERO ID: 7002451 OQD: High	Oslo (Dronningparken/Slottsparken, Frogner-seteren/Holmenkollen, Grønmo, Alnabru, VEAS), NO Scenario: Earthworms from terrestrial urban environments (n = 5; DF = 0; Sampling Period: 2018)	LOD: 20.0 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Heimstad et al. 2019 HERO ID: 7002451 OQD: High	Oslo (Grønmo, Ekebergparken, Bøler, Alna I, Alna II, Alna III, Kjelsås, Holmenkollen, Arnestad (near VEAS) , Slottsparken), NO Scenario: Fieldfare egg samples from terrestrial urban environments (n = 20; DF = 0; Sampling Period: 2018)	LOD: 20.0 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Heimstad et al. 2019 HERO ID: 7002451 OQD: High	Oslo, NO Scenario: Sparrowhawk egg samples from terrestrial urban environments (n = 3; DF = 0; Sampling Period: 2017 - 2018)	LOD: 60.0 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Heimstad et al. 2019 HERO ID: 7002451 OQD: High	Oslo (Sørkedalen, Hellerudmyra), NO Scenario: Red fox liver samples from terrestrial urban environments (n = 10; DF = 0; Sampling Period: 2017 - 2018)	LOD: 60.0 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Heimstad et al. 2019 HERO ID: 7002451 OQD: High	Oslo (Kryssbydalen, Maridalen, Sørkedalen), NO Scenario: Badger liver samples from terrestrial urban environments (n = 8; DF = 0; Sampling Period: 2017 - 2018)	LOD: 60.0 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Heimstad et al. 2019 HERO ID: 7002451 OQD: High	Oslo, NO Scenario: Brown rat liver samples from terrestrial urban environments (n = 3; DF = 0; Sampling Period: 2017 - 2018)	LOD: 200.0 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Norwegian Environment Agency et al. 2019 HERO ID: 7002475 OQD: Medium	Oslo, NO Scenario: Herring gull (blood) from the Inner Oslofjord (n = 3; DF = 0; Sampling Period: 2018)	LOD: Not Reported LOQ: Not Reported	NR	NR	NR	NR	NR
Norwegian Environment Agency et al. 2019 HERO ID: 7002475 OQD: Medium	Oslo, NO Scenario: Herring gull (egg) from the Inner Oslofjord (n = 3; DF = 0; Sampling Period: 2018)	LOD: Not Reported LOQ: Not Reported	NR	NR	NR	NR	NR

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May 2026

4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Terrestrial Species

Table 12 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Eulaers et al. 2014 HERO ID: 2343720 <i>OQD:</i> Medium	Normandy, FR Scenario: Body feathers from barn owls from Normandy, France (n = 11; DF = 0.96; Sampling Period: 2008 - 2009)	LOD: Not Reported LOQ: 0.4 ng/g	0.36 ng/g	7.07 ng/g	NR	50th: 1.08 ng/g;	NR
Eulaers et al. 2014 HERO ID: 2343720 <i>OQD:</i> Medium	Flanders, BE Scenario: Body feathers from barn owls from Flanders, Belgium (n = 13; DF = 0.96; Sampling Period: 2008 - 2009)	LOD: Not Reported LOQ: 0.4 ng/g	0.40 ng/g	6.06 ng/g	NR	50th: 0.72 ng/g;	NR
Huber et al. 2015 HERO ID: 2823276 <i>OQD:</i> High	Sklinna and Rost, NO Scenario: Pooled eggs from herring gull from 2 remote islands (n = 6; DF = 0; Sampling Period: May, 2012 - Jun., 2012)	LOD: 0.4 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Huber et al. 2015 HERO ID: 2823276 <i>OQD:</i> High	Sklinna and Rost, NO Scenario: Pooled eggs from common eider from 2 remote islands (n = 6; DF = 0; Sampling Period: May, 2012 - Jun., 2012)	LOD: 0.4 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Huber et al. 2015 HERO ID: 2823276 <i>OQD:</i> High	Sklinna and Rost, NO Scenario: Pooled eggs from European shag from 2 remote islands (n = 6; DF = 0; Sampling Period: May, 2012 - Jun., 2012)	LOD: 0.4 ng/g LOQ: Not Reported	NR	NR	<LOD	NR	NR
Zacs et al. 2018 HERO ID: 4162092 <i>OQD:</i> High	Throughout the country, LV Scenario: Muscle Concentrations of Wild Boars in Latvia (n = 9; DF = 0.11; Sampling Period: Sept., 2016 - Dec., 2016)	LOD: Not Reported LOQ: Not Reported	ND	1.30 pg/g	0.14 pg/g (AM)	NR	NR
Zacs et al. 2018 HERO ID: 4162092 <i>OQD:</i> High	Throughout the country, LV Scenario: Liver Concentrations of Wild Boars in Latvia (n = 6; DF = 0.17; Sampling Period: Sept., 2016 - Dec., 2016)	LOD: Not Reported LOQ: Not Reported	ND	2.52 pg/g	0.42 pg/g (AM)	NR	NR
Zacs et al. 2018 HERO ID: 4162092 <i>OQD:</i> High	Throughout the country, LV Scenario: Muscle Concentrations of Red Deer in Latvia (n = 8; DF = 0.13; Sampling Period: Sept., 2016 - Dec., 2016)	LOD: Not Reported LOQ: Not Reported	ND	0.64 pg/g	0.08 pg/g (AM)	NR	NR
Zacs et al. 2018 HERO ID: 4162092 <i>OQD:</i> High	Throughout the country, LV Scenario: Liver Concentrations of Red Deer in Latvia (n = 5; DF = 0.2; Sampling Period: Sept., 2016 - Dec., 2016)	LOD: Not Reported LOQ: Not Reported	ND	1.34 pg/g	0.27 pg/g (AM)	NR	NR
Zacs et al. 2018 HERO ID: 4162092 <i>OQD:</i> High	Throughout the country, LV Scenario: Muscle Concentrations of Moose in Latvia (n = 7; DF = 0.14; Sampling Period: Sept., 2016 - Dec., 2016)	LOD: Not Reported LOQ: Not Reported	ND	1.09 pg/g	0.16 pg/g (AM)	NR	NR
Zacs et al. 2018 HERO ID: 4162092 <i>OQD:</i> High	Throughout the country, LV Scenario: Liver Concentrations of Moose in Latvia (n = 7; DF = 0.71; Sampling Period: Sept., 2016 - Dec., 2016)	LOD: Not Reported LOQ: Not Reported	ND	14.6 pg/g	4.31 pg/g (AM)	NR	NR

4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Monitoring

Wastewater

Table 13: Data Extraction Tables of Exposure Monitoring Studies for Wastewater

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Norwegian Environment Agency et al. 2019 HERO ID: 7002475 <i>OQD:</i> Medium	Oslo, NO Scenario: Treated effluent wastewater from the Bekkelaget Sewage Treatment Plant (n = 2; DF = 0; Sampling Period: 2018)	LOD: 0.05 µg/L LOQ: Not Reported	POINT VALUE(S): [<LOD]				
Guerra et al. 2010 HERO ID: 1040997 <i>OQD:</i> High	Ebro River, ES Scenario: Sewage sludge from WWTP (n = 7; DF = 0.86; Sampling Period: 2008)	LOD: 3.0 ng/g LOQ: 9.9 ng/g	<LOQ	1329.0 ng/g	576.64 ng/g (AM)	50th: 411.0 ng/g;	457.35 ng/g (ASD)
Gorga et al. 2013 HERO ID: 1676764 <i>OQD:</i> Medium	Catalonia, ES Scenario: Treated effluent from 17 WWTPs in Catalonia, Spain. (n = 17; DF = 0.88; Sampling Period: 2009)	LOD: 3.0 ng/g LOQ: 9.9 ng/g	NR	NR	104.0 ng/g (AM)	50th: 96.7 ng/g;	NR
Chokwe et al. 2012 HERO ID: 1927538 <i>OQD:</i> Uninformative	Vereeniging, ZA Scenario: Influent at the Leeuwkuil WWTP. (n = 1; DF = 1; Sampling Period: 2012)	LOD: 0.1 µg/L LOQ: 0.34 µg/L	POINT VALUE(S): [6.629 µg/L]				
Chokwe et al. 2012 HERO ID: 1927538 <i>OQD:</i> Uninformative	Vereeniging, ZA Scenario: Effluent at the Leeuwkuil WWTP. (n = 1; DF = 1; Sampling Period: 2012)	LOD: 0.1 µg/L LOQ: 0.34 µg/L	POINT VALUE(S): [3.269 µg/L]				
Chokwe et al. 2012 HERO ID: 1927538 <i>OQD:</i> Uninformative	Vereeniging, ZA Scenario: Raw influent at the Leeuwkuil WWTP. (n = 1; DF = 1; Sampling Period: 2012)	LOD: 0.1 µg/L LOQ: 0.34 µg/L	Data point: 6.806 µg/L				
Hwang et al. 2012 HERO ID: 1927598 <i>OQD:</i> High	Ulsan, KR Scenario: Industrial wastewater treatment plant (n = 7; DF = 1; Sampling Period: 2012)	LOD: 0.35 ng/g LOQ: Not Reported	4.01 µg/kg	144.0 µg/kg	41.39 µg/kg (AM)	50th: 28.0 µg/kg;	49.22 µg/kg (ASD)
Hwang et al. 2012 HERO ID: 1927598 <i>OQD:</i> High	Busan, KR Scenario: Municipal wastewater treatment plant (n = 4; DF = 1; Sampling Period: 2012)	LOD: 0.35 ng/g LOQ: Not Reported	67.1 µg/kg	618.0 µg/kg	243.28 µg/kg (AM)	50th: 144.0 µg/kg;	252.86 µg/kg (ASD)
Kim et al. 2016 HERO ID: 3545985 <i>OQD:</i> High	Ulsan and Busan, KR Scenario: Effluent of WWTP in Ulsan and Busan (n = 15; DF = NR; Sampling Period: Jun., 2010 - Oct., 2010)	LOD: Not Reported LOQ: Not Reported	588.7 pg/L	6671.0 pg/L	1851.0 pg/L (AM)	50th: 1224.0 pg/L;	1553.0 pg/L (ASD)
Kim et al. 2016 HERO ID: 3545985 <i>OQD:</i> High	Ulsan and Busan, KR Scenario: Influent of WWTP in Ulsan and Busan (n = 15; DF = NR; Sampling Period: Jun., 2010 - Oct., 2010)	LOD: Not Reported LOQ: Not Reported	983.3 pg/L	13145.0 pg/L	4032.0 pg/L (AM)	50th: 2776.0 pg/L;	3418.0 pg/L (ASD)

4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Experimental

Consumer Products

Table 14: Data Extraction Tables of Exposure Experimental Studies for Consumer Products

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Richter et al. 1997 HERO ID: 1486884 <i>OQD:</i> Low	Braunschweig, DE (Testing Location) Scenario: Measured concentrations in components of 42 printed circuit boards from commercial electronic appliance waste (n = 42; DF = NR)	LOD: 1 mg/kg LOQ: Not Reported			weighted mean: 14400 µg/kg		
Kajiwarara et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, LCD television 1, rear cover (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [68 ng/g]		
Kajiwarara et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, LCD television 1, front cover (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [92 ng/g]		
Kajiwarara et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, LCD television 1, power board (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [90 ng/g]		
Kajiwarara et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, LCD television 1, PC board for fluorescent (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [890 ng/g]		
Kajiwarara et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, LCD television 1, other PC boards (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [87 ng/g]		
Kajiwarara et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, LCD television 1, LCD panel (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [7.3 ng/g]		
Kajiwarara et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, LCD television 2, rear cover (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [15 ng/g]		
Kajiwarara et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, LCD television 2, front cover (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported			POINT VALUE(S): [21 ng/g]		

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Experimental

Consumer Products

Table 14 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Kajiwaru et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, LCD television 2, PC board for power supply and fluorescent (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported				POINT VALUE(S): [840 ng/g]	
Kajiwaru et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, LCD television 2, other PC boards (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported				POINT VALUE(S): [74 ng/g]	
Kajiwaru et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, LCD television 2, LCD panel (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported				POINT VALUE(S): [8.7 ng/g]	
Kajiwaru et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, laptop computer, chassis (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported				POINT VALUE(S): [2700 ng/g]	
Kajiwaru et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, laptop computer, key-board top (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported				POINT VALUE(S): [1400 ng/g]	
Kajiwaru et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, laptop computer, PC boards (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported				POINT VALUE(S): [800 ng/g]	
Kajiwaru et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, laptop computer, cooling fan and speaker (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported				POINT VALUE(S): [9500000 ng/g]	
Kajiwaru et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, laptop computer, AC adapter (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported				POINT VALUE(S): [81 ng/g]	
Kajiwaru et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, laptop computer, LCD panel (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported				POINT VALUE(S): [110 ng/g]	
Kajiwaru et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, curtain 1 (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported				POINT VALUE(S): [21 ng/g]	

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Experimental

Consumer Products

Table 14 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Kajiwaru et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, curtain 2 (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [16 ng/g]				
Kajiwaru et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, electrical outlet 1 (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [340 ng/g]				
Kajiwaru et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, electrical outlet 2 (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [15000 ng/g]				
Kajiwaru et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, wallpaper 1 (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [13 ng/g]				
Kajiwaru et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, wallpaper 2 (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [24 ng/g]				
Kajiwaru et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, wallpaper 3 (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [20 ng/g]				
Kajiwaru et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, wallpaper 4 (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [16 ng/g]				
Takigami et al. 2008 HERO ID: 1927735 <i>OQD:</i> High	JP (Product source) Scenario: Measured concentration in plastic components of circuit board of used TVs (n = 5; DF = 1)	LOD: 0.04 ng/g LOQ: Not Reported	7.9 µg/g	1300 µg/g	280 µg/g (AM)	NR	NR
Takigami et al. 2008 HERO ID: 1927735 <i>OQD:</i> High	JP (Product source) Scenario: Measured concentration in front plastic components of used TVs (n = 5; DF = 1)	LOD: 0.04 ng/g LOQ: Not Reported	0.24 µg/g	67 µg/g	20 µg/g (AM)	NR	NR
Takigami et al. 2008 HERO ID: 1927735 <i>OQD:</i> High	JP (Product source) Scenario: Measured concentration in rear plastic components of used TVs (n = 5; DF = 1)	LOD: 0.04 ng/g LOQ: Not Reported	0.12 µg/g	97000 µg/g	19000 µg/g (AM)	NR	NR
Saito et al. 2007 HERO ID: 1927779 <i>OQD:</i> Medium	Tokyo, JP; Korea; Thailand, JP,KR,TH (Product source) Scenario: Measured migration rates of flame retardants on the surface of computer monitors (n = 7; DF = 0)	LOD: 173 pg LOQ: Not Reported	NR	NR	ND	NR	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

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Consumer Products

Table 14 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Saito et al. 2007 HERO ID: 1927779 <i>OQD:</i> Medium	Tokyo, JP; Korea, JP,KR (Product source) Scenario: Measured migration rates of flame retardants on the surface of TV sets (n = 8; DF = 0)	LOD: 173 pg LOQ: Not Reported	NR	NR	ND	NR	NR
Morf et al. 2005 HERO ID: 1927802 <i>OQD:</i> Medium	Regensdorf, CH (Testing Location) Scenario: Measured concentration in small WEEE input prior to WEEE treatment plant processing (n = NR; DF = NR)	LOD: Not Reported LOQ: Not Reported	95% confidence interval: 1330 mg/kg ; 95% confidence interval: 1510 mg/kg				
Morf et al. 2005 HERO ID: 1927802 <i>OQD:</i> Medium	Regensdorf, CH (Testing Location) Scenario: Measured concentration in small WEEE output from WEEE treatment plant – copper cable scrap (n = 4; DF = NR)	LOD: Not Reported LOQ: Not Reported	95% confidence interval: 3 mg/kg ; 95% confidence interval: 7 mg/kg				
Morf et al. 2005 HERO ID: 1927802 <i>OQD:</i> Medium	Regensdorf, CH (Testing Location) Scenario: Measured concentration in small WEEE output from WEEE treatment plant – printed circuit boards (n = 6; DF = NR)	LOD: Not Reported LOQ: Not Reported	95% confidence interval: 25 mg/kg ; 95% confidence interval: 61 mg/kg				
Morf et al. 2005 HERO ID: 1927802 <i>OQD:</i> Medium	Regensdorf, CH (Testing Location) Scenario: Measured concentration in small WEEE output from WEEE treatment plant – wooden TV housings (n = 2; DF = NR)	LOD: Not Reported LOQ: Not Reported	95% confidence interval: 40 mg/kg ; 95% confidence interval: 120 mg/kg				
Morf et al. 2005 HERO ID: 1927802 <i>OQD:</i> Medium	Regensdorf, CH (Testing Location) Scenario: Measured concentration in small WEEE output from WEEE treatment plant – plastic TV/PC housings (n = 6; DF = NR)	LOD: Not Reported LOQ: Not Reported	95% confidence interval: 21000 mg/kg ; 95% confidence interval: 25000 mg/kg				
Morf et al. 2005 HERO ID: 1927802 <i>OQD:</i> Medium	Regensdorf, CH (Testing Location) Scenario: Measured concentration in small WEEE output from WEEE treatment plant – TV housing rear covers (n = 2; DF = NR)	LOD: Not Reported LOQ: Not Reported	95% confidence interval: 4300 mg/kg ; 95% confidence interval: 10300 mg/kg				
La Guardia et al. 2015 HERO ID: 3012534 <i>OQD:</i> Medium	Seattle, Washington, US (Product source) Scenario: Measured concentrations in foam blocks from gyms 2 and 4 (n = 16; DF = 0)	LOD: Not Reported LOQ: Not Reported	NR	NR	ND	NR	NR
Keller et al. 2014 HERO ID: 3023922 <i>OQD:</i> Low	NC, US (Testing Location) Scenario: Measured concentration in camping tent (n = 11; DF = 0.09)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [25.7 mg/g; 160 µg/cm ²]				
Sindik et al. 2015 HERO ID: 4159657 <i>OQD:</i> Medium	Unknown (Product source) Scenario: Measured concentration in imported Europe source plastic TV cathode ray tubes (CRT) casings collected as e-waste (n = 100; DF = NR)	LOD: 10-25 µg/g LOQ: Not Reported	NR	NR	NR	NR	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Experimental

Consumer Products

Table 14 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Sindik et al. 2015 HERO ID: 4159657 OQD: Medium	Unknown (Product source) Scenario: Measured concentration in imported Europe source plastic computer cathode ray tubes (CRT) casings collected as e-waste (n = 50; DF = NR)	LOD: 10-25 $\mu\text{g/g}$ LOQ: Not Reported	NR	NR	NR	NR	NR
Sindik et al. 2015 HERO ID: 4159657 OQD: Medium	Unknown (Product source) Scenario: Measured concentration in imported Asia source plastic TV cathode ray tubes (CRT) casings collected as e-waste (n = 58; DF = NR)	LOD: 10-25 $\mu\text{g/g}$ LOQ: Not Reported	NR	NR	NR	NR	NR
Sindik et al. 2015 HERO ID: 4159657 OQD: Medium	Unknown (Product source) Scenario: Measured concentration in imported Asia source plastic computer cathode ray tubes (CRT) casings collected as e-waste (n = 100; DF = NR)	LOD: 10-25 $\mu\text{g/g}$ LOQ: Not Reported	NR	NR	NR	NR	NR
Sindik et al. 2015 HERO ID: 4159657 OQD: Medium	Unknown (Product source) Scenario: Measured concentration in imported America source plastic TV cathode ray tubes (CRT) casings collected as e-waste (n = 0; DF = NR)	LOD: 10-25 $\mu\text{g/g}$ LOQ: Not Reported	NR	NR	NR	NR	NR
Sindik et al. 2015 HERO ID: 4159657 OQD: Medium	Unknown (Product source) Scenario: Measured concentration in imported America source plastic computer cathode ray tubes (CRT) casings collected as e-waste (n = 74; DF = NR)	LOD: 10-25 $\mu\text{g/g}$ LOQ: Not Reported	NR	NR	NR	NR	NR
Sindik et al. 2015 HERO ID: 4159657 OQD: Medium	Ogun State; Lagos State, NG (Testing Location) Scenario: Measured concentration in imported plastic TV cathode ray tubes (CRT) casings collected as e-waste (n = 158; DF = 0.05)	LOD: 10-25 $\mu\text{g/g}$ LOQ: Not Reported	0.11 %	16.5 %	7.34 % (AM)	NR	NR
Sindik et al. 2015 HERO ID: 4159657 OQD: Medium	Ogun State; Lagos State, NG (Testing Location) Scenario: Measured concentration in imported plastic computer cathode ray tubes (CRT) casings collected as e-waste (n = 224; DF = 0.45)	LOD: 10-25 $\mu\text{g/g}$ LOQ: Not Reported	0.03 %	16.7 %	6.9 % (AM)	NR	NR
Yu et al. 2017 HERO ID: 4162199 OQD: High	Qingyuan, Guangdong Province; Jiangmen, Hubei Province, CN (Testing Location) Scenario: Measured concentrations in housing plastic from desktop mainframe e-waste (n = 3; DF = 1)	LOD: 2 ng/g LOQ: Not Reported	NR	NR	1.78 mg/kg (AM)	NR	NR
Yu et al. 2017 HERO ID: 4162199 OQD: High	Qingyuan, Guangdong Province; Jiangmen, Hubei Province, CN (Testing Location) Scenario: Measured concentrations in housing plastic from LCD monitor e-waste (n = 6; DF = 0.83)	LOD: 2 ng/g LOQ: Not Reported	NR	NR	10.96 mg/kg (AM)	NR	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Experimental

Consumer Products

Table 14 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Yu et al. 2017 HERO ID: 4162199 OQD: High	Qingyuan, Guangdong Province; Jiangmen, Hubei Province, CN (Testing Location) Scenario: Measured concentrations in housing plastic from washing machine e-waste (n = 6; DF = 0.5)	LOD: 2 ng/g LOQ: Not Reported	NR	NR	0.11 mg/kg (AM)	NR	NR
Yu et al. 2017 HERO ID: 4162199 OQD: High	Qingyuan, Guangdong Province; Jiangmen, Hubei Province, CN (Testing Location) Scenario: Measured concentrations in housing plastic from CRT TV e-waste (n = 3; DF = 1)	LOD: 2 ng/g LOQ: Not Reported	NR	NR	4.64 mg/kg (AM)	NR	NR
Yu et al. 2017 HERO ID: 4162199 OQD: High	Qingyuan, Guangdong Province; Jiangmen, Hubei Province, CN (Testing Location) Scenario: Measured concentrations in housing plastic from refrigerator e-waste (n = 1; DF = 1)	LOD: 2 ng/g LOQ: Not Reported	NR	NR	3.01 mg/kg (AM)	NR	NR
Yu et al. 2017 HERO ID: 4162199 OQD: High	Qingyuan, Guangdong Province; Jiangmen, Hubei Province, CN (Testing Location) Scenario: Measured concentrations in printed circuit boards from CRT TV and printer/copier e-waste (n = 6; DF = 0.67)	LOD: 2 ng/g LOQ: Not Reported	POINT VALUE(S): [4.44 mg/kg; 5.70 mg/kg; 0.26 mg/kg; 8.38 mg/kg]				
Miyake et al. 2017 HERO ID: 4175610 OQD: Medium	Cities and Regions NR, CN,DE,JP,KR,VN (Product source) Scenario: Measured concentration, flame-retarded curtains, post-processing method, all samples (n = 24; DF = 0)	LOD: Not Reported LOQ: 21.9 µg/g	NR	NR	<LOQ	NR	NR
Miyake et al. 2017 HERO ID: 4175610 OQD: Medium	Cities and Regions NR, CN,DE,JP,KR,VN (Product source) Scenario: Measured concentration, flame-retarded curtains, flame-resistant fabrics, all samples (n = 16; DF = 0)	LOD: Not Reported LOQ: 21.9 µg/g	NR	NR	<LOQ	NR	NR
Qian et al. 2019 HERO ID: 5043411 OQD: Medium	Hangzhou, CN (Author Affiliation) Scenario: Measured amount in PUF from 7-day chamber experiment with cotton sound insulation (not covered in dust) (n = 3; DF = 1)	LOD: Not Reported LOQ: Not Reported	NR	NR	44.2 ng (AM)	NR	10.9 ng (ASD)
Qian et al. 2019 HERO ID: 5043411 OQD: Medium	Hangzhou, CN (Author Affiliation) Scenario: Measured amount in PUF from 7-day chamber experiment with cotton sound insulation (covered in dust) (n = 3; DF = 1)	LOD: Not Reported LOQ: Not Reported	NR	NR	41.9 ng (AM)	NR	10.5 ng (ASD)
Sun et al. 2018 HERO ID: 5043501 OQD: High	Hangzhou, CN (Author Affiliation) Scenario: Measured concentration in carpet purchased from manufacturer (n = 3; DF = 0)	LOD: 0.005-0.072 pg/m ³ LOQ: Not Reported	NR	NR	<LOD	NR	NR

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Experimental

Consumer Products

Table 14 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Sun et al. 2018 HERO ID: 5043501 OQD: High	Hangzhou, CN (Author Affiliation) Scenario: Measured concentration in circuit board purchased from manufacturer (n = 3; DF = 0)	LOD: 0.005-0.072 pg/m ³ LOQ: Not Reported	NR	NR	<LOD	NR	NR
Sun et al. 2018 HERO ID: 5043501 OQD: High	Hangzhou, CN (Author Affiliation) Scenario: Measured concentration in decorative laminate purchased from manufacturer (n = 3; DF = 0)	LOD: 0.005-0.072 pg/m ³ LOQ: Not Reported	NR	NR	<LOD	NR	NR
Sun et al. 2018 HERO ID: 5043501 OQD: High	Hangzhou, CN (Author Affiliation) Scenario: Measured concentration in used computer casing (n = 3; DF = 1)	LOD: 0.005-0.072 pg/m ³ LOQ: Not Reported	NR	NR	50 µg/g (AM)	NR	7 µg/g (ASD)
Sun et al. 2018 HERO ID: 5043501 OQD: High	Hangzhou, CN (Author Affiliation) Scenario: Measured concentration in sound insulation cotton purchased from manufacturer (n = 3; DF = 1)	LOD: 0.005-0.072 pg/m ³ LOQ: Not Reported	NR	NR	500 µg/g (AM)	NR	79.5 µg/g (ASD)
Sun et al. 2018 HERO ID: 5043501 OQD: High	Hangzhou, CN (Author Affiliation) Scenario: Measured concentration in PVC floor purchased from manufacturer (n = 3; DF = 1)	LOD: 0.005-0.072 pg/m ³ LOQ: Not Reported	NR	NR	298 µg/g (AM)	NR	48.5 µg/g (ASD)
Sun et al. 2018 HERO ID: 5043501 OQD: High	Hangzhou, CN (Author Affiliation) Scenario: Measured emission rates from carpet purchased from manufacturer (n = 3; DF = 0)	LOD: 0.005-0.072 pg/m ³ LOQ: Not Reported	NR	NR	<LOD	NR	NR
Sun et al. 2018 HERO ID: 5043501 OQD: High	Hangzhou, CN (Author Affiliation) Scenario: Measured emission rates from used computer casing (n = 3; DF = 0)	LOD: 0.005-0.072 pg/m ³ LOQ: Not Reported	NR	NR	<LOD	NR	NR
Sun et al. 2018 HERO ID: 5043501 OQD: High	Hangzhou, CN (Author Affiliation) Scenario: Measured emission rates from circuit board purchased from manufacturer (n = 3; DF = 0)	LOD: 0.005-0.072 pg/m ³ LOQ: Not Reported	NR	NR	<LOD	NR	NR
Sun et al. 2018 HERO ID: 5043501 OQD: High	Hangzhou, CN (Author Affiliation) Scenario: Measured emission rates from decorative laminate purchased from manufacturer (n = 3; DF = 0)	LOD: 0.005-0.072 pg/m ³ LOQ: Not Reported	NR	NR	<LOD	NR	NR
Sun et al. 2018 HERO ID: 5043501 OQD: High	Hangzhou, CN (Author Affiliation) Scenario: Measured emission rates from PVC floor purchased from manufacturer (n = 3; DF = 0)	LOD: 0.005-0.072 pg/m ³ LOQ: Not Reported	NR	NR	<LOD	NR	NR

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4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Experimental

Consumer Products

Table 14 – continued from previous page

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Sun et al. 2018 HERO ID: 5043501 <i>OQD:</i> High	Hangzhou, CN (Author Affiliation) Scenario: Measured emission rates from sound insulation cotton purchased from manufacturer (n = 3; DF = 1)	LOD: 0.005-0.072 pg/m ³ LOQ: Not Reported	NR	NR	193 pg/g/h (AM)	NR	57.5 pg/g/h (ASD)
Wu et al. 2019 HERO ID: 5167126 <i>OQD:</i> High	Indiana, US (Testing Location) Scenario: Measured concentration of flame retardant in foam, fabric and composites from child car seats (n = NR; DF = 0)	LOD: 1.2 ng/mL LOQ: Not Reported	NR	NR	<LOD	NR	NR

4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Experimental

Building Materials

Table 15: Data Extraction Tables of Exposure Experimental Studies for Building Materials

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Kajiwara et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, insulation board 1 (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [22 ng/g]				
Kajiwara et al. 2011 HERO ID: 1927630 <i>OQD:</i> Medium	Tsukuba City, Ibaraki Prefecture, JP (Product source) Scenario: Measured concentration, insulation board 2 (n = 1; DF = 1)	LOD: Not Reported LOQ: Not Reported	POINT VALUE(S): [22 ng/g]				
Saito et al. 2007 HERO ID: 1927779 <i>OQD:</i> Medium	Tokyo, JP, JP (Product source) Scenario: Measured migration rate of flame retardant in floor, wall and ceiling (n = NR; DF = 0)	LOD: 173 pg LOQ: Not Reported	NR	NR	ND	NR	NR

4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Experimental

Environmental Media

Table 16: Data Extraction Tables of Exposure Experimental Studies for Environmental Media

Citation Information	Site and Data Description	Limit (LOD/LOQ)	Min	Max	Mean	Percentile	Variance
Qian et al. 2019 HERO ID: 5043411 <i>OQD:</i> Medium	Hangzhou, CN (Author Affiliation) Scenario: Measured amount in dust applied to cotton sound insulation in 7-day chamber experiment (n = 3; DF = 1)	LOD: Not Reported LOQ: Not Reported	NR	NR	34.4 ng (AM)	NR	8.9 ng (ASD)

4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA)

Modeling

Dust (Indoor)

Table 17: Data Extraction Tables of Exposure Modeling Studies for Dust (Indoor)

Citation Information	Site and Data Description	Min	Max	Mean	Percentile	Variance
Larsson et al. 2018 HERO ID: 4292136 <i>OQD:</i> High	Stockholm, SE (Modeled Location) Scenario: Modeled oral daily intake from preschool dust of 4-year old preschoolers.	NR	NR	0.15 ng/kg bw/day (GM)	95th: 2.0 ng/kg bw/day;	NR
Larsson et al. 2018 HERO ID: 4292136 <i>OQD:</i> High	Stockholm, SE (Modeled Location) Scenario: Modeled dermal daily intake from preschool dust of 4-year old preschoolers.	NR	NR	0.005 ng/kg bw/day (GM)	95th: 0.07 ng/kg bw/day;	NR
Giovanoulis et al. 2019 HERO ID: 5412073 <i>OQD:</i> Medium	Stockholm, SE (Modeled Location) Scenario: Modeled daily exposure dose for preschoolers from dust ingestion, intermediate exposure	NR	NR	0.557 ng/kg bw/day (AM)	50th: 0.282 ng/kg bw/day; 95th: 2.39 ng/kg bw/day;	NR
Giovanoulis et al. 2019 HERO ID: 5412073 <i>OQD:</i> Medium	Stockholm, SE (Modeled Location) Scenario: Modeled daily exposure dose for preschoolers from dust ingestion, high exposure	NR	NR	0.928 ng/kg bw/day (AM)	50th: 0.469 ng/kg bw/day; 95th: 3.98 ng/kg bw/day;	NR
Pawar et al. 2017 HERO ID: 5469614 <i>OQD:</i> Medium	GB (Modeled Location) Scenario: Modeled adult dermal exposure dose of FR present in indoor dust from homes, offices and cars - low exposure scenario	<0.1 ng/kg bw/day	NR	NR	NR	NR
Pawar et al. 2017 HERO ID: 5469614 <i>OQD:</i> Medium	GB (Modeled Location) Scenario: Modeled adult dermal exposure dose of FR present in indoor dust from homes, offices and cars - average exposure scenario	NR	NR	0.1 ng/kg bw/day (AM)	NR	NR
Pawar et al. 2017 HERO ID: 5469614 <i>OQD:</i> Medium	GB (Modeled Location) Scenario: Modeled adult dermal exposure dose of FR present in indoor dust from homes, offices and cars - high exposure scenario	NR	0.7 ng/kg bw/day	NR	NR	NR
Pawar et al. 2017 HERO ID: 5469614 <i>OQD:</i> Medium	GB (Modeled Location) Scenario: Modeled toddler dermal exposure dose of FR present in indoor dust from homes and cars - low exposure scenario	<0.1 ng/kg bw/day	NR	NR	NR	NR
Pawar et al. 2017 HERO ID: 5469614 <i>OQD:</i> Medium	GB (Modeled Location) Scenario: Modeled toddler dermal exposure dose of FR present in indoor dust from homes and cars - average exposure scenario	NR	NR	0.1 ng/kg bw/day (AM)	NR	NR
Pawar et al. 2017 HERO ID: 5469614 <i>OQD:</i> Medium	GB (Modeled Location) Scenario: Modeled toddler dermal exposure dose of FR present in indoor dust from homes and cars - high exposure scenario	NR	0.9 ng/kg bw/day	NR	NR	NR

4,4-(1-Methylethylidene)bis[2,6-dibromophenol] (TBBPA) Glossary of Select Terms for Data Extraction Tables

Table 18: Glossary of Select Terms for Data Extraction

Term	Definition
7Q10	The lowest 7-day average flow that occurs (on average) once every 10 years
30Q5	30 consecutive days of lowest flow over a 5-year period
ADD	Average daily dose
ADR	Acute dose rate
ADR _{POT}	Potential acute dose rate
BAF	Bioaccumulation factor
BCF	Bioconcentration factor
BSAF	Biota-sediment accumulation factor
CADD	Chronic average daily dose
CEM	Consumer Exposure Model
COU	Condition of use
dw	Dry weight
ECHO	EPA's Enforcement and Compliance History Online database
EPA	Environmental Protection Agency (U.S.)
IIOAC	Integrated indoor-outdoor air calculator
KOC	Organic carbon/water partition coefficient
Kp	Dermal permeability coefficient
MOE	Margin of exposure
NAICS	North American Industry Classification System
OES	Occupational exposure scenario
PESS	Potentially exposed or susceptible subpopulation
RCRA	Resource Conservation and Recovery Act
TBBPA	4,4'-(1-Methylethylidene)bis[2,6-dibromophenol] or Tetrabromobisphenol A
TMF	Trophic magnification factor
TRI	Toxics Release Inventory
TSCA	Toxic Substances Control Act
ww	Wet weight