

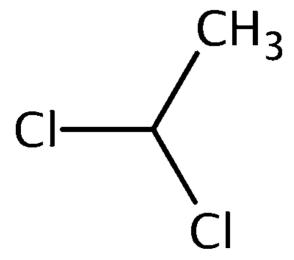
July 2024 Office of Chemical Safety and Pollution Prevention

Draft Risk Evaluation for 1,1-Dichloroethane

Systematic Review Supplemental File:

Data Quality Evaluation and Data Extraction Information for Physical and Chemical Properties

CASRN: 75-34-3



This supplemental file contains information regarding the data extraction and evaluation results for data sources that were considered for the *Draft Risk Evaluation for 1,1-Dichloroethane* that underwent systematic review. EPA used the TSCA systematic review process described in the *Draft Systematic Review Protocol Supporting TSCA Risk Evaluations for Chemical Substances* (also referred to as the '2021 Draft Systematic Review Protocol'). The systematic review steps are further described in the *Draft Risk Evaluation for 1,1-Dichloroethane - Systematic Review Protocol*. EPA conducted data extractions and data quality evaluations based on author-reported descriptions and results; additional analyses (*e.g.*, statistical analyses) potentially conducted by EPA are not contained in this supplemental file. Additionally, the overall quality determination (OQD) for each reference represents the data as a whole for each study, and not for individual metric domains within a study. Within the contents of this document, 1,1-dichloroethane may be referred to as the acronyms 1,1-DCA and 1,1-DCE. The acronyms 1,2-DCA, 1,2-DCE, and DCE refer to the chemical 1,2-dichloroethane. The acronyms 1,1-TCE, 1,1,2-TCA, and TCE refer to the chemical 1,1,2-trichloroethane. The acronym trans-1,2-DCE refers to the chemical trans-1,2-dichloroethylene. The acronym 1,2-DCP refers to the chemical 1,2-dichloropropane.

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192177	NIOSH, (2007). NIOSH pocket guide to chemical hazards.	12
8435203	NIOSH, (1978). Occupational health guideline for 1,1-dichloroethane.	13
5926110	NLM, (2018). PubChem: Hazardous Substance Data Bank: 1,1-Dichloroethane, 75-34-3.	14
5926374	O'Neil, M. J. (2013). Ethylidene chloride. 75-34-3. [1,1-Dichloroethane]. :705.	15
5331600	Rumble, J. R. (2018). 1,1-Dichloroethane. :3-16.	16
5926110	NLM, (2018). PubChem: Hazardous Substance Data Bank: 1,1-Dichloroethane, 75-34-3.	17
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5926414	Elsevier, (2019). Reaxys: physical-chemical property data for 1,1-dichloroethane. CAS Registry Number: 75-34-3	26
9087635	Li, M., J.C., Pitzer, K. S. (1956). The Thermodynamic Properties of 1,1-Dichloroethane: Heat Capacities from 14 to 294°K., Heatsof Fusion and Vaporization, Vapor Pressure and Entropy of the Ideal Gas. The Barrier to Internal Rotation. Journal of the American Chemical Society 78(6):1077-1080.	27
192177	NIOSH, (2007). NIOSH pocket guide to chemical hazards.	28
8435203	NIOSH, (1978). Occupational health guideline for 1,1-dichloroethane.	29
5926110	NLM, (2018). PubChem: Hazardous Substance Data Bank: 1,1-Dichloroethane, 75-34-3.	30
5926374	O'Neil, M. J. (2013). Ethylidene chloride. 75-34-3. [1,1-Dichloroethane]. :705.	31
5926256	RSC, (2019). ChemSpider: 1,1-Dichloroethane.	32
5331600	Rumble, J. R. (2018). 1,1-Dichloroethane. :3-16.	33
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5926139	U.S. EPA, (2019). Chemistry Dashboard Information for 1,1-Dichloroethane. 75-34-3	51
5434414	Varushchenko, R. M., Druzhinina, A. I., Kuramshina, G. M., Dorofeeva, O. V. (2007). Thermodynamics of vaporization-of some freons and halogenated ethanes and propanes. Fluid Phase Equilibria 256(1-2):112-122.	56
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9087635	Li, M., J.C., Pitzer, K. S. (1956). The Thermodynamic Properties of 1,1-Dichloroethane: Heat Capacities from 14 to 294°K., Heatsof Fusion and Vaporization, Vapor Pressure and Entropy of the Ideal Gas. The Barrier to Internal Rotation. Journal of the American Chemical Society 78(6):1077-1080.	82
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554554	Mueller, M., Klein, W. (1992). Comparative evaluation of methods predicting water solubility for organic compounds. Chemosphere 25(6):769-782.	128
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List of Abbreviations and Acronyms for Data Quality Evaluation and Extraction Tables

1,1-Dichloroethane Physical Form or State HERO ID: 7309759 Table: 1 of 1

Canada,, G.o. (2021). Fact sheet: 1,1-dichloroethane.

OECD Harmonized Physical Form or State **Template: HERO ID:** 7309759 **EXTRACTION** Data **Parameter** CASRN and Test Material 75-34-3; 1,1-DICHLOROETHANE Confidentiality, Type, and Guideline none; not specified; NR Solvent, Reactivity, Storage, and Stability NR; NR; NR; NR Radiolabel, Source, State, and Purity NR; NR; liquid; NR Notes: denser than water Results Value liquid Results Details 20 C EVALUATION

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information.
		(Method Objectivity)		
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Study Citation:

^{*} Related References: Citing Agency for Toxic Substances and Disease Registry (ATSDR), 1990. Toxicological Profile for 1,1- Dichloroethane. U.S. Department of Health and Human Services, Public Health Service, Georgia, USA.

Study Citation: OECD Harmonized	DOE, (2016). Table 1: Chemicals of Concern and Associated Chemical Information. PACs. Physical Form or State			
Template: HERO ID:	3981013			
	2,01012		EXTRACTIO	N
Parameter		Data	EATRACTIO	
CASRN and Test Material		75-34-3; 1,1-dichloroethane		
Confidentiality, Type, and	Guideline	none; not specified; not specified		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR		
Radiolabel, Source, State,		NR; NR; NR; NR Notes: NR		
Results Value		liquid		
Results Details		not specified		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review; specific source not reported.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

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

1,1-Dichloroethane Physical Form or State HERO ID: 4293766 Table: 1 of 1

Study Citation: OECD Harmonized Dreher, E. L., Beutel, K. K., Myers, J. D., Lübbe, T., Krieger, S., Pottenger, L. H. (2014). Chloroethanes and chloroethylenes. :1-81.

Physical Form or State

Template:

HERO ID: 4293766

EVED	ACTION	Т

Parameter	Data EXTRACTION
CACDY IT WAS I	
CASRN and Test Material	75-34-3; Not reported
Confidentiality, Type, and Guideline	None; Experimental; No guideline
Solvent, Reactivity, Storage, and Stability	Not reported; Not reported; Not reported; Not reported
Radiolabel, Source, State, and Purity	Not reported; Not reported; Liquid; Not reported Notes: Not reported
Results Value	Colorless liquid
Results Details	Not Reported

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties.
Domain 2: Test Reliab	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a known data-collection, prepared by experts in the field.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Physical Form or State 1,1-Dichloroethane HERO ID: 192177 Table: 1 of 1

Study Citation: OECD Harmonized NIOSH, (2007). NIOSH pocket guide to chemical hazards.

Physical Form or State

Template:

HERO ID: 192177

EXTR	ACT	rt <i>c</i>	N
	AU		,,,

Parameter	Data
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; Liquid; NR Notes: NR
Results Value	Colorless; oily liquid; chloroform-like odor
Results Details	Class IB Flammable Liquid

	EVALUATION				
Domain		Metric	Rating	Comments	
Domain 1: Substance					
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.	
Domain 2: Test Reliab	ility				
	Metric 3:	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information.	
		(Method Objectivity)			
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.	
Domain 3: Other					
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Qual	ity Determ	ination	High		

Overall	Quality	Determination	
O v Ci aii	Quanty	Detter militation	

Study Citation: OECD Harmonized	NIOSH, (1978) Physical Form	Occupational health guideline for 1,1-d or State	lichloroethane.	
Template: HERO ID:	8435203			
			EXTRACTIO	N
Parameter		Data		
CASRN and Test Material		75-34-3; 1,1-DICHLOROETHANE		
Confidentiality, Type, and	Guideline	none; not specified; NR		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; colorless liquid; NR Notes: ch	loroform like odor	
Results Value		colorless liquid		
Results Details		NR		
			EVALUATIO	<u> </u>
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information.
		(Method Objectivity)		
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
Domain 3. Guici	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: Several references listed in the reference but not attributed to specific data.

HERO ID: 5926110 Table: 1 of 1

1,1-Dichloroethane Physical Form or State

Study Citation: OECD Harmonized	NLM, (2018). I Physical Form of	PubChem: Hazardous Substance Data Barry State	ank: 1,1-Dichloro	ethane, 75-34-3.
Template:	i nysicai i omi	Si State		
HERO ID:	5926110			
			EXTRACTIO	N .
Parameter		Data		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State, a	•	NR; NR; NR		
Results Value	and I arrey	liquid		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	itv			
	Metric 3:	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information.
		(Method Objectivity)		
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
Domain 3. Omei	Metric 5:	Databases	High	Data is from a publicly available and peer-reviewed database.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
	mente o.	11104015	1 1/21	rading of this factor is not approache to this and of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: NIOSH Pocket Guide to Chemical Hazards. Department of Health and Human Services, Centers for Disease Control & Prevention. National Institute for Occupational Safety & Health. DHHS (NIOSH) 2010 (2010)

Study Citation: OECD Harmonized O'Neil, M. J. (2013). Ethylidene chloride. 75-34-3. [1,1-Dichloroethane]. :705.

Physical Form or State

Template:			
HERO ID: 5926374			
		EXTRACTIO	ON .
Parameter	Data		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Results Value	oily liquid		
Results Details	Not Reported		
		EVALUATIO	N .
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information.
	(Method Objectivity)		

Overall Quality Determination		High		
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 5:	Databases	High	Data is from a recognized data collection where data are peer-reviewed by experts in the field.
Domain 3: Other	M 5	D. I.	TT' 1	
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 3:	Reliability/Unbiased (Method Objectivity)	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Relia	,		27/1	
	Wietife 2.	прооргание	Iligii	reasured data are consistent with the subject entrinear 8 physical element properties.
	Metric 1: Metric 2:	Representativeness Appropriateness	High High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical's physical/chemical properties.

HERO ID: 5331600 Table: 1 of 1

Study Citation: OECD Harmonized Rumble, J. R. (2018). 1,1-Dichloroethane. :3-16.

Databases

Models

DECD Harmonized Physical Form or State

Metric 5:

Metric 6:

		EXTRACTIO	N .
Parameter	Data	EXTRACTIO	
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Results Value	liquid		
Results Details	Not Reported		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	N/A	Rating of this factor is not applicable to this kind of information.
Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.

|--|

High

N/A

Data is from a recognized data collection where data are peer-reviewed by experts in the

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

HERO ID: 5926110 Table: 1 of 4

Study Citation: OECD Harmonized	NLM, (2018). I Physical Form of	PubChem: Hazardous Substance Data E or State	ank: 1,1-Dichloro	pethane, 75-34-3.
Template: HERO ID:	5926110			
			EXTRACTIO	ON .
Parameter		Data		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Results Details		colorless, oily liquid		
			EVALUATIO	N .
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a publicly available and peer-reviewed database.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

^{*} Related References: NIOSH Pocket Guide to Chemical Hazards. Department of Health and Human Services, Centers for Disease Control & Prevention. National Institute for Occupational Safety & Health. DHHS (NIOSH) 2010 (2010)

EXTRACTION

HERO ID: 5926110 Table: 2 of 4

1,1-Dichloroethane Physical Form or State

Study Citation:

NLM, (2018). PubChem: Hazardous Substance Data Bank: 1,1-Dichloroethane, 75-34-3.

OECD Harmonized

Physical Form or State

Data

Template: HERO ID:

Parameter

5926110

CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR		
Results Details	aromatic ethereal odor		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information.
	(Method Objectivity)		
Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other			
Metric 5:	Databases	High	Data is from a publicly available and peer-reviewed database.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Larranaga, M.D., Lewis, R.J. Sr., Lewis, R.A.; Hawley's Condensed Chemical Dictionary 16th Edition. John Wiley & Sons, Inc. Hoboken, NJ 2016, p. 592

EXTRACTION

Study Citation: OECD Harmonized NLM, (2018). PubChem: Hazardous Substance Data Bank: 1,1-Dichloroethane, 75-34-3.

Physical Form or State

Data

Models

Template: HERO ID:

Parameter

5926110

Metric 6:

Overall Quality Determination

CASRN and Test Materi	ial	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, an	d Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Stor	age, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State	e, and Purity	NR; NR; NR; NR		
Results Details		chloroform-like odor		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Relial	bility			
	Metric 3:	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information.
		(Method Objectivity)		
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
Domain 3. Other	Metric 5:	Databases	High	Data is from a publicly available and peer-reviewed database.

N/A

High

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

^{*} Related References: NIOSH Pocket Guide to Chemical Hazards. Department of Health and Human Services, Centers for Disease Control & Prevention. National Institute for Occupational Safety & Health. DHHS (NIOSH) 2010 (2010)

EXTRACTION

Study Citation:

NLM, (2018). PubChem: Hazardous Substance Data Bank: 1,1-Dichloroethane, 75-34-3.

OECD Harmonized

Physical Form or State

Template: HERO ID:

5926110

Parameter	Data	231110110	
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Results Details	ether-like odor		
		EVALUATIO	N .
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information.
	(Method Objectivity)	- 1	5 6
Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other			
Metric 5:	Databases	High	Data is from a publicly available and peer-reviewed database.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
0 110 12 13	•	771	
Overall Quality Determine	ination	High	

^{*} Related References: NOAA, CAMEO Chemicals. Database of Hazardous Materials. 1,1-Dichloroethane (75-34-3). Natl Ocean Atmos Admin, Off Resp Rest; NOAA Ocean Serv

1,1-Dichloroethane HERO ID: 5155632 Table: 1 of 1

Study Citation: California Office of Environmental Health Hazard Assessment (derive unit risk and cancer potency values.			sment (OEHHA) (2011). Appendix B: Chemical-specific summaries of the information used
OECD Harmonized Femplate:	Melting Point	and cancer potency varies.		
HERO ID:	5155632			
			EXTRACTIO	N
Parameter		Data		
Melting Point		-96.7 °C		
CASRN and Test Material		75-34-3; 1,1-DICHLOROETHANE		
Confidentiality, Type, and C	Guideline	none; not specified; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR Notes: NR		
Results Details Methods		NR		
Standard Deviation Results	1	NR		
Results Details		NR		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Citing ATSDR 1990, HERO ID 644890.

1,1-Dichloroethane Melting Point HERO ID: 5155634 Table: 1 of 1

Study Citation:	California Office of Environmental Health Hazard Assessment (OEHHA) (2003). Public health goals for chemicals in drinking water: 1,1-dichloroethane				
OECD Harmonized	in drinking wate Melting Point	er.			
Template:					
HERO ID:	5155634				
			EXTRACTION		
Parameter		Data			
		07.07			
Melting Point		-97 °C			
CASRN and Test Material	Cuidalina	75-34-3; 1,1-Dichloroethane			
Confidentiality, Type, and C Solvent, Reactivity, Storage		None; calculation; NA NA; NA; NA; NA			
Radiolabel, Source, State, a	-	NA; NA; NA Notes: NA			
Results Details Methods	iliu Fulity	NA, NA, NA, NA NOIES. NA NA			
Standard Deviation Results		0.3			
Results Details	•	Reported values are mean and standard de	eviation of the values fo	und in a handhook	
Regulio Detailo		reported values are mean and standard de	or and varies to		
			EVALUATION		
Domain		Metric	Rating	Comments	
Domain 1: Substance					
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.	
Domain 2: Test Reliabil	itv				
20114111 21 1000 1101141011	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased	
		(Method Objectivity)		towards a particular product or outcome.	
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.	
Domain 3: Other					
Domain 3. Other	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Qualit	ty Determi	nation	Medium		

^{*} Related References: Citing Mackay, D; Shiu, WY; Ma, KC (1993) Illustrated handbook of physical-chemical properties and environmental fate for organic chemicals. Volume I.

1,1-Dichloroethane Melting Point HERO ID: 7309759 Table: 1 of 1

Study Citation: OECD Harmonized Template:	Canada,, G.o. (Melting Point	2021). Fact sheet: 1,1-dichloroethane.		
HERO ID:	7309759			
			EXTRACTIO	N
Parameter		Data		
Melting Point		-97 - °C		
CASRN and Test Material		75-34-3; 1,1-DICHLOROETHANE		
Confidentiality, Type, and	Guideline	none; not specified; NR		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR Notes: NR		
Results Details Methods		NR		
Standard Deviation Result	s	NR		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.

N/A

High

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

Metric 6:

Overall Quality Determination

Models

^{*} Related References: Citing Agency for Toxic Substances and Disease Registry (ATSDR), 1990. Toxicological Profile for 1,1-Dichloroethane. U.S. Department of Health and Human Services, Public Health Service, Georgia, USA.

1,1-Dichloroethane HERO ID: 3981013 Table: 1 of 1

Study Citation: OECD Harmonized	, , ,	Table 1: Chemicals of Concern and Asso	ciated Chemical I	nformation. PACs.
Template:	Melting Point			
HERO ID:	3981013			
			EXTRACTIO	N
Parameter		Data		
Melting Point		-96.9 - °C		
CASRN and Test Material		75-34-3; 1,1-dichloroethane		
Confidentiality, Type, and	Guideline	none; not specified; none		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR Notes: NR		
Results Details Methods		not reported		
Standard Deviation Results	S	not reported		
Results Details		not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review; specific source not reported.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

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

1,1-Dichloroethane Melting Point HERO ID: 4293766 Table: 1 of 1

Study Citation:

Dreher, E. L., Beutel, K. K., Myers, J. D., Lübbe, T., Krieger, S., Pottenger, L. H. (2014). Chloroethanes and chloroethylenes. :1-81.

OECD Harmonized	Melting Point	, , , , , , , , , , , , , , , , , , ,		of, L. 11. (2014). Chlorochianes and chlorochiylenes1-01.
Template:				
HERO ID:	4293766			
			EXTRACTIO	N
Parameter		Data		
Melting Point		-96.6 °C		
CASRN and Test Material		75-34-3; Not Reported		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storag	ge, and Stability	Not reported; Not reported; Not reported	l; Not reported	
Radiolabel, Source, State,	and Purity	Not reported; Not reported; Not reported	l; Not reported Not	es: Not reported
Results Details Methods		Not reported		
Standard Deviation Result	S	Not reported		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a known data-collection, prepared by experts in the field.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

1,1-Dichloroethane Melting Point HERO ID: 5926414 Table: 1 of 1

Study Citation: OECD Harmonized	Elsevier, (2019) Melting Point). Reaxys: physical-chemical property da	ta for 1,1-dichlor	oethane. CAS Registry Number: 75-34-3
Template: HERO ID:	5926414			
			EXTRACTIO	N
Parameter		Data		
Melting Point		-97.496.6 °C		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Results Details Methods		Measured conditions were not reported;	6 values were repo	rted in Reaxys; 5 of these values were reported in the range of -97.4 to -96.6°C; 1 data
		point was outside the range.		
Standard Deviation Results	S	Not Reported		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

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

1,1-Dichloroethane Melting Point HERO ID: 9087635 Table: 1 of 1

Study Citation: Li, M., J.C., Pitzer, K. S. (1956). The Thermodynamic Properties of 1,1-Dichloroethane: Heat Capacities from 14 to 294°K., Heatsof Fusion and Vapor-

ization, Vapor Pressure and Entropy of the Ideal Gas. The Barrier to Internal Rotation. Journal of the American Chemical Society 78(6):1077-1080.

OECD Harmonized Template:

Melting Point

HERO ID: 9087635

EXTR	ACTION

Parameter	Data				
Melting Point	= 176.18 - K				
CASRN and Test Material	75-34-3; 1,1-Dichloroethane				
Confidentiality, Type, and Guideline	None; Experimental (Extrapolation); None, fraction melting observed				
Solvent, Reactivity, Storage, and Stability	NA; NA; NA				
Radiolabel, Source, State, and Purity	NA; Reported as commercially available; Solid and liquid; purity 99.87% by fractional distillation and recrystallization 3 times Notes: NA				
Results Details Methods	Results extrapolated to complete melting (0.90 fraction melted at 176.13K).				
Standard Deviation Results	± 0.5				
Results Details	Not Reported				

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

Overall Quality Determination High

Melting Point 1,1-Dichloroethane HERO ID: 192177 Table: 1 of 1

Study Citation: OECD Harmonized NIOSH, (2007). NIOSH pocket guide to chemical hazards.

Melting Point

OECD Harmonized Femplate: HERO ID:	Melting Point 192177			
ILEKO ID.	1)2177		EXTRACTIO	N
Parameter		Data	EXTRACTIO	
Melting Point		-143 - F		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	uideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage	, and Stability	NR; NR; NR		
Radiolabel, Source, State, a	-	NR; NR; NR; NR Notes: NR		
Results Details Methods		NR		
Standard Deviation Results		NR		
Results Details		Reported as freezing point		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabili	ty			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a recognized, peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination	High
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1,1-Dichloroethane Melting Point HERO ID: 8435203 Table: 1 of 1

Study Citation: OECD Harmonized	NIOSH, (1978) Melting Point	. Occupational health guideline for 1,1-c	dichloroethane.	
Template: HERO ID:	8435203			
			EXTRACTIO	N
Parameter		Data		
Melting Point		-96.7 - °C		
CASRN and Test Material		75-34-3; 1,1-DICHLOROETHANE		
Confidentiality, Type, and C	Guideline	none; not specified; NR		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR Notes: NR		
Results Details Methods		NR		
Standard Deviation Results	1	NR		
Results Details		Also reported as -142F.		
			EVALUATIO	<u> </u>
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: Several references listed in the reference but not attributed to specific data.

1,1-Dichloroethane Melting Point HERO ID: 5926110 Table: 1 of 1

Study Citation: OECD Harmonized	NLM, (2018). Melting Point	PubChem: Hazardous Substance Data Ba	nk: 1,1-Dichloro	ethane, 75-34-3.
Template:				
HERO ID:	5926110			
			EXTRACTIO	N
Parameter		Data		
Melting Point		-96.93 °C		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Results Details Methods		Not Reported		
Standard Deviation Results	3	Not Reported		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a publicly available, peer-reviewed database that provides references to a recognized data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	ination	High	

^{*} Related References: Haynes, W.M. (Ed.). CRC Handbook of Chemistry and Physics. 95th Edition. CRC Press LLC, Boca Raton: FL 2014-2015, p. 3-162.

Study Citation: O'Neil, M. J. (2013). Ethylidene chloride. 75-34-3. [1,1-Dichloroethane]. :705. OECD Harmonized Melting Point			. :705.	
Template:	manual cana			
HERO ID:	5926374			
			EXTRACTIO	N
Parameter		Data		
Melting Point		-98 °C		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline		None; Experimental; Not Reported		
Solvent, Reactivity, Storage, and Stability		NR; NR; NR; NR		
Radiolabel, Source, State, and Purity		NR; NR; NR; NR		
Results Details Methods		Not Reported		
Standard Deviation Results	S	Not Reported		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	litv			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu-
				sion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a recognized, peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

High

Overall Quality Determination

Study Citation: OECD Harmonized	RSC, (2019). Conditions and Melting Point	hemSpider: 1,1-Dichloroethane.		
Template: HERO ID:	5926256			
пекотр:	3920230			
D		Dete	EXTRACTION	
Parameter		Data		
Melting Point		-98 °C		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Results Details Methods		Not Reported		
Standard Deviation Results	3	Not Reported		
Results Details		Not Reported		
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: SynQuest

1,1-Dichloroethane Melting Point HERO ID: 5331600 Table: 1 of 1

Study Citation: OECD Harmonized Rumble, J. R. (2018). 1,1-Dichloroethane. :3-16.

Models

Melting Point

Template:

Template:			
HERO ID: 5331600			
		EXTRACTIO	N
Parameter	Data		
Melting Point	-96.93 °C		
CASRN and Test Material	75-34-3: 1.1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Results Details Methods	Not Reported		
Standard Deviation Results	Not Reported		
Results Details	Not Reported		
		EVALUATIO	N.
Domain	Metric	Rating	Comments
Domain 1: Substance	Monte	raing	Comments
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	High	Data is from a publicly available secondary source with references to a peer-reviewed

Overall Quality Determination

Metric 6:

High

N/A

database.

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

1,1-Dichloroethane Melting Point HERO ID: 5926139 Table: 1 of 4

Study Citation: OECD Harmonized	U.S. EPA, (201 Melting Point	9). Chemistry Dashboard Information for	1,1-Dichloroeth	ane. 75-34-3
Template: HERO ID:	5926139			
			EXTRACTIO	N
Parameter		Data		
Melting Point		-96.9 °C		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storag	-	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Results Details Methods		Not Reported		
Standard Deviation Results	S	Not Reported		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a publicly available database that provides references to the original, peer-reviewed source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	ination	High	

^{*} Related References: PhysProp

Study Citation: OECD Harmonized U.S. EPA, (2019). Chemistry Dashboard Information for 1,1-Dichloroethane. 75-34-3..

Melting Point

Template: HERO ID:

5926139

ments
chemical substance.
hemical's physical/chemical properties.
producing the information was biased
e appropriate based on the data's inclu- other secondary source.
references a peer-reviewed source.
nd of information.

Overall Quality Determination

High

^{*} Related References: NIOSH

1,1-Dichloroethane Melting Point HERO ID: 5926139 Table: 3 of 4

Study Citation: U.S. EPA, (2019). Chemistry Dashboard Information for 1,1-Dichloroethane. 75-34-3.. **OECD Harmonized** Melting Point

Domain 3: Other

Template:				
HERO ID:	5926139			
			EXTRACTION	
Parameter		Data		
Melting Point		-97 °C		
CASRN and Test Mate	erial	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, Solvent, Reactivity, St Radiolabel, Source, St	orage, and Stability	None; Experimental; Not Reported NR; NR; NR; NR NR: NR: NR: NR		
Results Details Metho		Not Reported		
Standard Deviation Re		Not Reported		
Results Details	zsuits	Not Reported		
			EVALUATION	_
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Rel	iability			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.

Medium

N/A

Data is from a publicly available secondary source with references to non-peer reviewed

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

Overall Quality Determination Medium

Databases

Models

Metric 5:

Metric 6:

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

1,1-Dichloroethane Melting Point HERO ID: 5926139 Table: 4 of 4

Study Citation: U.S. EPA, (2019). Chemistry Dashboard Information for 1,1-Dichloroethane. 75-34-3.. Melting Point

Template:

Domain 3: Other

Template:				
HERO ID:	5926139			
			EXTRACTION	
Parameter		Data		
Melting Point		-96.9 °C		
CASRN and Test Materi	al	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, an	d Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Stora	age, and Stability	NR; NR; NR		
Radiolabel, Source, State		NR; NR; NR; NR		
Results Details Methods		Not Reported		
Standard Deviation Resu	ılts	Not Reported		
Results Details		Not Reported		
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Relial	bility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.

Medium

N/A

Data is from a publicly available secondary source with references to non-peer reviewed

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

Overall Quality Determination Medium

Models

Databases

Metric 5:

Metric 6:

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

1,1-Dichloroethane Boiling Point HERO ID: 5155632 Table: 1 of 1

Study Citation:		California Office of Environmental Health Hazard Assessment (OEHHA) (2011). Appendix B: Chemical-specific summaries of the information used to derive unit risk and cancer potency values.		
OECD Harmonized	Boiling Point	and cancer potency varies.		
Template:	C			
HERO ID:	5155632			
			EXTRACTIO	N
Parameter		Data		
Boiling Point		57.3 C		
CASRN and Test Material		75-34-3; 1,1-DICHLOROETHANE		
Confidentiality, Type, and		none; not specified; Not reported		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State,		NR; NR; NR Notes: NR		
Standard Deviation Results	•	NR		
Results Details		Not Reported		
			EVALUATIO	A)
Domain		Metric	Rating	Comments
Domain 1: Substance		Wietric	Kating	Comments
Domain 1. Substance	Metric 1:	Danragantativanass	Lligh	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Representativeness Appropriateness	High High	Measured data are consistent with the subject chemical substance structural features.
	Metric 2.	Appropriatelless	підіі	weasured data are consistent with the subject chemical substance structural reatures.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain 3. Other	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	tv Determi	nation	High	

^{*} Related References: Citing ATSDR 1990, HERO ID 644890 (likely collected from Merck; same value as HERO ID 5926374).

1,1-Dichloroethane Boiling Point HERO ID: 5155634 Table: 1 of 1

Study Citation:		of Environmental Health Hazard Asses	ssment (OEHHA) (200	3). Public health goals for chemicals in drinking water: 1,1-dichloroethane
OECD Harmonized	in drinking water. Boiling Point			
Template:				
HERO ID:	5155634			
			EXTRACTION	
Parameter		Data		
Boiling Point		57.3 C		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Guideline	None; calculation; NA		
Solvent, Reactivity, Storage		NA; NA; NA; NA		
Radiolabel, Source, State, a	•	NA; NA; NA; NA Notes: NA		
Standard Deviation Results		0.2		
Results Details		Reported values are mean and standard of	deviation of the values for	and in a handbook.
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	itv			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determina	ation	Medium	

^{*} Related References: Citing Mackay, D; Shiu, WY; Ma, KC (1993) Illustrated handbook of physical-chemical properties and environmental fate for organic chemicals. Volume I.

1,1-Dichloroethane Boiling Point HERO ID: 7309759 Table: 1 of 1

Canada,, G.o. (2021). Fact sheet: 1,1-dichloroethane.

OECD Harmonized Boiling Point Template: HERO ID: 7309759 EXTRACTION Data **Parameter** 57 - C **Boiling Point** CASRN and Test Material 75-34-3; 1,1-DICHLOROETHANE Confidentiality, Type, and Guideline none; not specified; NR Solvent, Reactivity, Storage, and Stability NR; NR; NR; NR Radiolabel, Source, State, and Purity NR; NR; NR; NR Notes: NR Standard Deviation Results NR Results Details Not Reported

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

Overall Quality Determination

Study Citation:

High

^{*} Related References: Citing Agency for Toxic Substances and Disease Registry (ATSDR), 1990. Toxicological Profile for 1,1- Dichloroethane. U.S. Department of Health and Human Services, Public Health Service, Georgia, USA.

1,1-Dichloroethane Boiling Point HERO ID: 3981013 Table: 1 of 1

Study Citation: OECD Harmonized	DOE, (2016). T Boiling Point	Table 1: Chemicals of Concern and Asso	ciated Chemical I	nformation. PACs.
Template: HERO ID:	3981013			
			EXTRACTIO	N
Parameter		Data		
Boiling Point		57.3 - C		
CASRN and Test Material		75-34-3; 1,1-dichloroethane		
Confidentiality, Type, and C	Guideline	none; not specified; not specified		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR Notes: NR		
Standard Deviation Results	1	not reported		
Results Details		@ 760 mm Hg		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review; specific source not reported.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

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

1,1-Dichloroethane **Boiling Point** HERO ID: 4293766 Table: 1 of 1

Study Citation:

Dreher, E. L., Beutel, K. K., Myers, J. D., Lübbe, T., Krieger, S., Pottenger, L. H. (2014). Chloroethanes and chloroethylenes. :1-81.

OECD Harmonized

Boiling Point

Template:

HERO ID: 4293766

FYTD	ACTION	

Parameter	EXTRACTION Data
Boiling Point	57.3 C
CASRN and Test Material	75-34-3; Not Reported
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	Not reported; Not reported; Not reported
Radiolabel, Source, State, and Purity	Not reported; Not reported; Not reported Notes: Not reported
Standard Deviation Results	Not reported
Results Details	Boiling point at 101.3 kPa

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

1,1-Dichloroethane Boiling Point HERO ID: 5926414 Table: 1 of 1

Study Citation: OECD Harmonized	Elsevier, (2019) Boiling Point). Reaxys: physical-chemical property da	ta for 1,1-dichlor	oethane. CAS Registry Number: 75-34-3		
Template:	, and the second					
HERO ID:	5926414					
			EXTRACTIO	N		
Parameter		Data				
5 W 5 L		767 7029				
Boiling Point		56.5 - 59.2 C				
CASRN and Test Material	G ' 1 1'	75-34-3; 1,1-Dichloroethane				
Confidentiality, Type, and C		None; Experimental; Not Reported				
Solvent, Reactivity, Storage	•	NR; NR; NR				
Radiolabel, Source, State, a Standard Deviation Results	•	NR; NR; NR				
	;	Not Reported	1. D 0 64	1 (1) (1 (5) 5) 20 (7) 7(1 (10 1)		
Results Details		@ 760-761 torr; 18 values were reported in Reaxys; 8 of these values were reported in the range of 56.5 to 59.2 C at 760-761 torr; 10 values were outside this range or measured at unreported or non-standard pressures.				
		outside this range of incastred at unrepo	rica of non-standar	u prossures.		
			EVALUATIO	N		
Domain		Metric	Rating	Comments		
Domain 1: Substance						
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.		
Domain 2: Test Reliabil	itv					
Domain 21 Tool Remain	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased		
		(Method Objectivity)		towards a particular product or outcome.		
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.		
Domain 3: Other						
Domain 3. Outer	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.		
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		
Overall Qualit	ty Determi	nation	High			

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

1,1-Dichloroethane Boiling Point HERO ID: 10225173 Table: 1 of 1

Study Citation: National Institute of Standards and Technology (NIST), (2022). NIST Chemistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database

OECD Harmonized

No. 69. Boiling Point

Template:

HERO ID: 10225173

EXTRACTION

	EXTRACTION
Parameter	Data
Boiling Point	330.5 K
CASRN and Test Material	75-34-3; Not Reported
Confidentiality, Type, and Guideline	Not Reported; Not Reported; Not Reported
Solvent, Reactivity, Storage, and Stability	Not Reported; Not Reported; Not Reported
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not Reported
Standard Deviation Results	0.5 K
Results Details	Average of 18 values.

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

Overall Quality Determination High

1,1-Dichloroethane **Boiling Point** HERO ID: 192177 Table: 1 of 1

Study Citation: OECD Harmonized NIOSH, (2007). NIOSH pocket guide to chemical hazards.

Boiling Point

Template:

HERO ID:	192177			
			EXTRACTIO	N
Parameter		Data		
Boiling Point		135 - F		
CASRN and Test Mater	rial	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, a		None; Experimental; None		
Solvent, Reactivity, Sto		NR; NR; NR		
Radiolabel, Source, Sta		NR; NR; NR Notes: NR		
Standard Deviation Res	•	NR		
Results Details		at 1 atmosphere		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	e			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Relia	ability			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qua	lity Determi	nation	High	

1,1-Dichloroethane Boiling Point HERO ID: 8435203 Table: 1 of 1

Study Citation: OECD Harmonized	NIOSH, (1978) Boiling Point	. Occupational health guideline for 1,1-d	lichloroethane.	
Template: HERO ID:	8435203			
			EXTRACTIO	N
Parameter		Data		
Boiling Point		57.3 - C		
CASRN and Test Material		75-34-3; 1,1-DICHLOROETHANE		
Confidentiality, Type, and C	Guideline	none; not specified; NR		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR Notes: NR		
Standard Deviation Results		NR		
Results Details		at 760 mmHg, also reported as 135F		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: Several references listed in the reference but not attributed to specific data.

1,1-Dichloroethane Boiling Point HERO ID: 5926110 Table: 1 of 1

Study Citation: OECD Harmonized	NLM, (2018). F Boiling Point	PubChem: Hazardous Substance Data B	ank: 1,1-Dichloro	ethane, 75-34-3.
Template: HERO ID:	5026110			
HERO ID:	5926110			
D 4		D 4	EXTRACTIO	N
Parameter		Data		
Dailing Daint		57.4 C		
Boiling Point CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Guidalina	None; Experimental; Not Reported		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State, a		NR; NR; NR; NR		
Standard Deviation Results	•	Not Reported		
Results Details	•	Not Reported		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	itv			
Domain 2. Test Rendon	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain 5: Other	Metric 5:	Databases	High	Data is from a publicly available, peer-reviewed database that provides references to a recognized data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: Haynes, W.M. (Ed.). CRC Handbook of Chemistry and Physics. 95th Edition. CRC Press LLC, Boca Raton: FL 2014-2015, p. 3-162.

1,1-Dichloroethane **Boiling Point** HERO ID: 5926374 Table: 1 of 1

Study Citation: OECD Harmonized O'Neil, M. J. (2013). Ethylidene chloride. 75-34-3. [1,1-Dichloroethane]. :705.

Boiling Point

Template:

HERO ID: 5926374

		EXTRACTIO	N .
Parameter	Data		
Boiling Point	57.3 C		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Standard Deviation Results	Not Reported		
Results Details	Not Reported		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	High	Data is from a peer-reviewed data collection.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Boiling Point 1,1-Dichloroethane HERO ID: 5331600 Table: 1 of 1

Study Citation: OECD Harmonized Rumble, J. R. (2018). 1,1-Dichloroethane. :3-16.

Boiling Point

Template: HERO ID:

5331600

		EXTRACTIO	N
Parameter	Data		
Boiling Point	56.3 C		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Standard Deviation Results	Not Reported		
Results Details	Not Reported		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	High	Data is from a peer-reviewed data collection.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

1,1-Dichloroethane **Boiling Point** HERO ID: 6655446 Table: 1 of 1

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

Boiling Point

Template:

		EXTRACTIO	N
Parameter	Data		
Boiling Point	56.3		
CASRN and Test Material	Not Reported; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	none; experimental; Not Reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Standard Deviation Results	Not reported		
Results Details	Not reported		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	High	Data is from a known data-collection, prepared by experts in the field.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation: OECD Harmonized	U.S. EPA, (2019 Boiling Point	9). Chemistry Dashboard Information for	or 1,1-Dichloroeth	nane. 75-34-3
Template: HERO ID:	5926139			
			EXTRACTIO	N
Parameter		Data		
Boiling Point		57.4 C		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State, a	•	NR; NR; NR; NR		
Standard Deviation Results	•	Not Reported		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance			8	
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a publicly available database that provides references to the original, peer-reviewed source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: PhysProp

Study Citation:

U.S. EPA, (2019). Chemistry Dashboard Information for 1,1-Dichloroethane. 75-34-3..

OECD Harmonized

Boiling Point

Template:	0		
HERO ID: 592613	9		AT
Parameter	Data	EXTRACTIO	N
Boiling Point	57.2 C		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage, and Stabi	llity NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Standard Deviation Results	Not Reported		
Results Details	Not Reported		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric	1: Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2	2: Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliability			
Metric	3: Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric		Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric	5: Databases	High	Data is from a publicly available database that references a peer-reviewed source.
Metric	6: Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination

High

^{*} Related References: NIOSH

1,1-Dichloroethane **Boiling Point** HERO ID: 5926139 Table: 3 of 5

Study Citation:

U.S. EPA, (2019). Chemistry Dashboard Information for 1,1-Dichloroethane. 75-34-3..

OECD Harmonized

Boiling Point

Template:			
HERO ID: 5926139			
	5 .	EXTRACTION	
Parameter	Data		
Boiling Point	57 C		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Standard Deviation Results	Not Reported		
Results Details	Not Reported		
		EVALUATION	
Domain	Metric	Rating	Comments
Domain 1: Substance		<u> </u>	
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other			
Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determ	ination	Medium	

^{*} Related References: SynQuest

Study Citation:

U.S. EPA, (2019). Chemistry Dashboard Information for 1,1-Dichloroethane. 75-34-3..

OECD Harmonized

Boiling Point

Template:			
HERO ID: 5926139			
		EXTRACTION	
Parameter	Data		
Boiling Point	57 C		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Standard Deviation Results	Not Reported		
Results Details	Not Reported		
		EVALUATION	
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other			
Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Detern	nination	Medium	

^{*} Related References: Matrix Scientific

1,1-Dichloroethane **Boiling Point** HERO ID: 5926139 Table: 5 of 5

Study Citation:

U.S. EPA, (2019). Chemistry Dashboard Information for 1,1-Dichloroethane. 75-34-3..

OECD Harmonized

Boiling Point

Template: HERO ID: 5926139			
HERO ID: 3920139		EXTRACTION	
Parameter	Data	EATRACTION	
Boiling Point	57 C		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Standard Deviation Results	Not Reported		
Results Details	Not Reported		
		EVALUATION	
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other			
Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determi	ination	Medium	

^{*} Related References: Matrix Scientific

1,1-Dichloroethane Boiling Point HERO ID: 5434414 Table: 1 of 1

Study Citation: Varushchenko, R. M., Druzhinina, A. I., Kuramshina, G. M., Dorofeeva, O. V. (2007). Thermodynamics of vaporization-of some freons and halogenated

ethanes and propanes. Fluid Phase Equilibria 256(1-2):112-122.

OECD Harmonized

Boiling Point

Template:

HERO ID: 5434414

Parameter	Data
Boiling Point	330.37 K
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; Experimental; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; Prepared by Samara State Technical University and A.N. Nesmeyanov Institute of Organoelement Compounds; NR; 99.9%
Standard Deviation Results	0.01
Results Details	measured using a differential ebulliometer

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

1,1-Dichloroethane Density HERO ID: 7309759 Table: 1 of 2

Canada,, G.o. (2021). Fact sheet: 1,1-dichloroethane.

Study Citation:

OECD Harmonized Density **Template: HERO ID:** 7309759 **EXTRACTION** Data **Parameter** Density 1.17 -CASRN and Test Material 75-34-3; 1,1-DICHLOROETHANE Confidentiality, Type, and Guideline None; not specified; NR Solvent, Reactivity, Storage, and Stability NR; NR; NR; NR Radiolabel, Source, State, and Purity NR; NR; NR; NR Notes: NR Density Type relative density System NR Temperature NR Standard Deviation Results NR Results Details density relative to water (water=1)

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

* Related References: Citing Agency for Toxic Substances and Disease Registry (ATSDR), 1990. Toxicological Profile for 1,1- Dichloroethane. U.S. Department of Health and Human Services, Public Health Service, Georgia, USA.

1,1-Dichloroethane Density HERO ID: 7309759 Table: 2 of 2

Study Citation: Canada,, G.o. (2021). Fact sheet: 1,1-dichloroethane.

OECD Harmonized Density

Template: 7309759

	EXTRACTION
Parameter	Data
Density	3.4 -
CASRN and Test Material	75-34-3; 1,1-DICHLOROETHANE
Confidentiality, Type, and Guideline	None; not specified; NR
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR Notes: NR
Density Type	vapor density
System	NR
Temperature	NR
Standard Deviation Results	NR
Results Details	density relative to air (air=1.29)

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

* Related References: Citing Agency for Toxic Substances and Disease Registry (ATSDR), 1990. Toxicological Profile for 1,1- Dichloroethane. U.S. Department of Health and Human Services, Public Health Service, Georgia, USA.

Study Citation: OECD Harmonized Template:	DOE, (2016). T Density	Table 1: Chemicals of Concern and Assoc	iated Chemical I	nformation. PACs.
HERO ID:	3981013			
			EXTRACTIO	N
Parameter		Data		
Density		1.757 -		
CASRN and Test Material		75-34-3; 1,1-dichloroethane		
Confidentiality, Type, and	Guideline	none; not specified; not specified		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR Notes: NR		
Density Type		specific gravity (density of a substance d	ivided by the densi	ty of water)
System		not specified		
Temperature		20°C		
Standard Deviation Results	3	not reported		
Results Details		not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
2 chain 5. Outer	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review; specific source not reported.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

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

Study Citation:

Dreher, E. L., Beutel, K. K., Myers, J. D., Lübbe, T., Krieger, S., Pottenger, L. H. (2014). Chloroethanes and chloroethylenes. :1-81.

OECD Harmonized

Density

Template: HERO ID:

4293766

		EXTRACTIO	N
Parameter	Data		
Density	1.176 g/cm3		
CASRN and Test Material	75-34-3; Not Reported		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	Not reported; Not reported; Not reported	l; Not reported	
Radiolabel, Source, State, and Purity	Not reported; Not reported; Not reported	l; Not reported Not	es: Not reported
Density Type	Density		
System	Not reported		
Temperature	20°C		
Standard Deviation Results	Not reported		
Results Details	Not Reported		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	High	Data is from a known data-collection, prepared by experts in the field.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

1,1-Dichloroethane HERO ID: 192177 Table: 1 of 1

Study Citation:	NIOSH
OECD Harmonized	Density
Template:	

SH, (2007). NIOSH pocket guide to chemical hazards.

HERO ID: 192177

Parameter	Data		
Density	1.18 - Not reported		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; NR		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR Notes: NR		
Density Type	Specific gravity		
System	Not reported		
Temperature	Not Reported		
Standard Deviation Results	NR		
Results Details	Not Reported		
Results Details	Not Reported		
		EVALUATION	
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information
Daniel 2. Test Deliability			
Domain 2: Test Reliability	D 1: 1:1:4 /II 1: 1	M 11	
Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	(Method Objectivity) Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's
Wettle 4.	Renability/Analytical Method	Wedium	inclusion in a peer-reviewed/recognized database or other secondary source.
D : 4 04			
Domain 3: Other	D. d.	3.6.12	
Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information
Overall Quality Determ	ination	Medium	

1,1-Dichloroethane Density HERO ID: 8435203 Table: 1 of 2

Study Citation: OECD Harmonized	NIOSH, (1978) Density). Occupational health guideline for 1,1-dic	chloroethane.	
Template: HERO ID:	8435203			
			EXTRACTIO	on .
Parameter		Data		
Density		1.2 -		
CASRN and Test Material		75-34-3; 1,1-DICHLOROETHANE		
Confidentiality, Type, and	Guideline	none; not specified; NR		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR Notes: NR		
Density Type		specific gravity		
System		NR		
Temperature		NR		
Standard Deviation Results	S	NR		
Results Details		specific gravity relative to water (water = 1	1)	
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	(Method Objectivity) Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domaii 3. Ouici	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.

Models

Metric 6:

Overall Quality Determination

N/A

High

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

^{*} Related References: Several references listed in the reference but not attributed to specific data.

1,1-Dichloroethane Density HERO ID: 8435203 Table: 2 of 2

Study Citation: NIOSH, (1978). Occupational health guideline for 1,1-dichloroethane. **OECD Harmonized** Density

OECD Harmonized Template:

HERO ID: 8435203

EXTRACTION

Parameter	Data
Density	3.4 -
CASRN and Test Material	75-34-3; 1,1-DICHLOROETHANE
Confidentiality, Type, and Guideline	none; not specified; NR
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR Notes: NR
Density Type	vapor density
System	NR
Temperature	NR
Standard Deviation Results	NR
Results Details	air =1, at boiling point of 1,1-DICHLOROETHANE

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliab	oility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qual	ity Determ	ination	High	

* Related References: Several references listed in the reference but not attributed to specific data.

1,1-Dichloroethane Density HERO ID: 5926414 Table: 1 of 1

Study Citation: OECD Harmonized	Elsevier, (2019) Density). Reaxys: physical-chemical property data	ta for 1,1-dichlor	oethane. CAS Registry Number: 75-34-3
Template: HERO ID:	5926414			
			EXTRACTIO	N
Parameter		Data		
Density		1.1679 - 1.1805 g/cm3		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State, a	-	NR; NR; NR		
Temperature	Ž	20-25°C		
Standard Deviation Results		Not Reported		
Results Details		@20-25°C; 26 values were reported in R range or measured at unreported or non-s	•	vere reported in the range of 1.1679 to 1.1805 at 20-25°C; 13 values were outside this res.
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	itv			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	M-4-:- 4.	(Method Objectivity)	Madiana	towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
2 chain 3. Guidi	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

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

1,1-Dichloroethane Density HERO ID: 5926110 Table: 1 of 1

Study Citation: OECD Harmonized	NLM, (2018). PubChem: Hazardous Substance Data Bank: 1,1-Dichloroethane, 75-34-3. Density				
Template:	J				
HERO ID:	5926110				
			EXTRACTIO	N	
Parameter		Data			
.		1.1600 1.175 / 0			
Density		1.1680 - 1.175 g/cm3			
CASRN and Test Material	~	75-34-3; 1,1-Dichloroethane			
Confidentiality, Type, and		None; Experimental; Not Reported			
Solvent, Reactivity, Storage	•	NR; NR; NR			
Radiolabel, Source, State, a	and Purity	NR; NR; NR			
Temperature		1.1680 @ 25 C; 1.175 @ 20 C			
Standard Deviation Results	3	Not Reported			
Results Details		Not Reported			
			EVALUATIO	N	
Domain		Metric	Rating	Comments	
Domain 1: Substance					
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.	
Domain 2: Test Reliabil	ity				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.	
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.	
Domain 3: Other					
Domain 3. Other	Metric 5:	Databases	High	Data is from a publicly available, peer-reviewed database that provides references to a peer-reviewed data collection.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Qualit	ty Determi	ination	High		

^{*} Related References: O'Neil, M.J. (ed.). The Merck Index - An Encyclopedia of Chemicals, Drugs, and Biologicals. Cambridge, UK: Royal Society of Chemistry, 2013., p. 705

Study Citation: OECD Harmonized O'Neil, M. J. (2013). Ethylidene chloride. 75-34-3. [1,1-Dichloroethane]. :705.

Template:

HERO ID: 5926374

Density

EXTRACTION					
Data					
1.1757 g/cm3					
75-34-3; 1,1-Dichloroethane					
None; Experimental; Not Reported					
NR; NR; NR					
NR; NR; NR					
20°C					
Not Reported					
at 20°C relative to water at 4°C					

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

1,1-Dichloroethane Density HERO ID: 5926374 Table: 2 of 2

Study Citation:

O'Neil, M. J. (2013). Ethylidene chloride. 75-34-3. [1,1-Dichloroethane]. :705.

OECD Harmonized

Density

Template: HERO ID:

5926374

EXT	'RA	CT	OF	N

Data			
1.1680 g/cm3			
75-34-3; 1,1-Dichloroethane			
None; Experimental; Not Reported			
NR; NR; NR; NR			
NR; NR; NR; NR			
25°C			
Not Reported			
at 25°C relative to water at 4°C			
	1.1680 g/cm3 75-34-3; 1,1-Dichloroethane None; Experimental; Not Reported NR; NR; NR; NR NR; NR; NR NR; NR NR; NR 25°C Not Reported		

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

Study Citation: OECD Harmonized	RSC, (2019). O Density	ChemSpider: 1,1-Dichloroethane.		
Template: HERO ID:	5926256			
некотр:	3920230			
Parameter		Data	EXTRACTION	
Density		1.18 g/cm3		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Temperature		20°C		
Standard Deviation Results	S	Not Reported		
Results Details		Not Reported		
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
Domain 3. Other	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	tv Determi	nation	Medium	

^{*} Related References: SynQuest

1,1-Dichloroethane Density HERO ID: 5926256 Table: 2 of 2

Study Citation: OECD Harmonized	RSC, (2019). C	ChemSpider: 1,1-Dichloroethane.		
Template:	Density			
HERO ID:	5926256			
			EXTRACTION	
Parameter		Data		
Density		1.18 g/cm3		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storag		NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Temperature		Not Reported		
Standard Deviation Results	3	Not Reported		
Results Details		Not Reported		
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
Zomani J. Onto	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	tv Determi	nation	Medium	

^{*} Related References: Matrix Scientific

Study Citation: OECD Harmonized Rumble, J. R. (2018). 1,1-Dichloroethane. :3-16. Density

		EXTRACTIO	N
Parameter	Data		
Density	1.1757 g/cm3		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Temperature	20°C		
Standard Deviation Results	Not Reported		
Results Details	20°C		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	High	Data is from a recognized, peer-reviewed data collection.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

1,1-Dichloroethane Density HERO ID: 5926110 Table: 1 of 1

Study Citation: OECD Harmonized	NLM, (2018). I Density	PubChem: Hazardous Substance Data Ba	nk: 1,1-Dichloro	ethane, 75-34-3.
Template:				
HERO ID:	5926110			
			EXTRACTIO	N
Parameter		Data		
Density		3.44		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and		None; Experimental; Not specified		
Solvent, Reactivity, Storage		NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
System		Not reported		
Temperature		Not Reported		
Standard Deviation Results	3	Not Reported		
Results Details		air = 1		
			EVALUATIO	N.
Domain		Metric	Rating	Comments
Domain 1: Substance		Wette	Rating	Comments
Domain 1. Substance	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
	Wictire 2.	прргоришенезз	Ingn	measured data are consistent with the subject element a physical element properties.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-
		(Method Objectivity)		tion, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain 5: Other	Metric 5:	Databases	Uiah	Data is from a multiply available, many navioused database that massides and
	MEUIC J.	Databases	High	Data is from a publicly available, peer-reviewed database that provides references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

^{*} Related References: NOAA, CAMEO Chemicals. Database of Hazardous materials. 1,1-Dichloroethane (75-34-3). Natl Ocean Atmos Admin, Off Resp Rest; NOAA Ocean Serv

1,1-Dichloroethane Density HERO ID: 6629204 Table: 1 of 3

Study Citation:		PubChem database: compound summary	: 1,1-dichloroetha	ane.
OECD Harmonized Template:	Density			
HERO ID:	6629204			
			EXTRACTIO	N
Parameter		Data		
Density		3.44		
CASRN and Test Material		75-34-3; 1,1-DCA		
Confidentiality, Type, and C	Guideline	None; Experimental; Not specified		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
System		Not reported		
Temperature		Not Reported		
Standard Deviation Results		Not reported		
Results Details		Relative to air		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer- reviewed/recognized database or other secondary source.
Domain 3: Other				
20 3. Out	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	tv Determi	nation	High	

^{*} Related References: National Toxicology Program, Institute of Environmental Health Sciences, National Institutes of Health (NTP). 1992. National Toxicology Program Chemical Repository Database. Research Triangle Park, North Carolina.

1,1-Dichloroethane Density HERO ID: 6629204 Table: 2 of 3

Study Citation: NLM, (2020). PubChem database: compound summary: 1,1-dichloroethane. Density

		EXTRACTIO	N
Parameter	Data	2211410110	-
Densite	3.4		
Density CASRN and Test Material			
	75-34-3; 1,1-DCA		
Confidentiality, Type, and Guideline	None; Experimental; Not specified		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR		
System	Not reported		
Temperature	Not Reported		
Standard Deviation Results	Not reported		
Results Details	Relative vapor density (air = 1)		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-
	(Method Objectivity)	S	tion, and the methodology's objective is clear.
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu-
	• •		sion in a peer- reviewed/recognized database or other secondary source.

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

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

Overall Quality Determination High

Databases

Models

Metric 5:

Metric 6:

N/A

original sources.

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

Study Citation:		PubChem database: compound summary:	1,1-dichloroetha	ane.
OECD Harmonized	Density			
Template:				
HERO ID:	6629204			
			EXTRACTIO	N
Parameter		Data		
Density		3.44		
CASRN and Test Material		75-34-3; 1,1-DCA		
Confidentiality, Type, and Guideline		None; Experimental; Not specified		
Solvent, Reactivity, Storage, and Stability		NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
System		Not reported		
Temperature		Not Reported		
Standard Deviation Results	S	Not reported		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-
		(Method Objectivity)		tion, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu-

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

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

The data are from a source that is known but is missing elements required for High

designation such as peer-review, public availability, or the inclusion of references to

Overall Quality Determination	High
-------------------------------	------

Databases

Models

Metric 5:

Metric 6:

Domain 3: Other

Medium

N/A

original sources.

^{*} Related References: Occupational Safety and Health Administration (OSHA)

California Office of Environmental Health Hazard Assessment (OEHHA) (2011). Appendix B: Chemical-specific summaries of the information used to

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

towards a particular product or outcome.

1,1-Dichloroethane Vapor Pressure HERO ID: 5155632 Table: 1 of 1

OECD Harmonized	derive unit risk Vapor Pressure	and cancer potency values.		
Template:	1			
HERO ID:	5155632			
			EXTRACTIO)N
Parameter		Data		
Vapor Pressure		230 mm Hg		
CASRN and Test Material	1	75-34-3; 1,1-DICHLOROETHANE		
Confidentiality, Type, and	Guideline	none; not specified; Not reported		
Solvent, Reactivity, Storag	ge, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR Notes: NR		
Temperature		25 deg C		
System		NR		
Standard Deviation Result	ts	NR		
Results Details		Not Reported		
			EVALUATIO	N .
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.

	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination High

Reliability/Unbiased

(Method Objectivity)

Metric 3:

Study Citation:

Domain 2: Test Reliability

^{*} Related References: Citing ATSDR 1990, HERO ID 644890.

1,1-Dichloroethane Vapor Pressure HERO ID: 5155634 Table: 1 of 1

Study Citation: California Office of Environmental Health Hazard Assessment (OEHHA) (2003). Public health goals for chemicals in drinking water: 1,1-dichloroethane

in drinking water.

OECD Harmonized Template:

onized Vapor Pressure

HERO ID: 5155634

EXTR	ACT	LIUI	V

	EMIRITARY
Parameter	Data
Vapor Pressure	0.3 atm
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; calculation; NA
Solvent, Reactivity, Storage, and Stability	NA; NA; NA; NA
Radiolabel, Source, State, and Purity	NA; NA; NA Notes: NA
Temperature	NA
System	NA
Standard Deviation Results	0.0054
Results Details	Reported values are mean and standard deviation of the values found in a handbook.

			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliab	oility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
20mm c. oute	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination Medium

^{*} Related References: Citing Mackay, D; Shiu, WY; Ma, KC (1993) Illustrated handbook of physical-chemical properties and environmental fate for organic chemicals. Volume I.

Vapor Pressure 1,1-Dichloroethane HERO ID: 7309759 Table: 1 of 1

Study Citation: OECD Harmonized Canada,, G.o. (2021). Fact sheet: 1,1-dichloroethane.

Vapor Pressure

Template:

HERO ID:	7309759			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		220 - mm Hg		
CASRN and Test Material		75-34-3; 1,1-DICHLOROETHANE		
Confidentiality, Type, and C	Guideline	none; not specified; NR		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR Notes: very volatile		
Temperature		room temperature		
System		NR		
Standard Deviation Results	3	NR		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

* Related References: Citing Agency for Toxic Substances and Disease Registry (ATSDR), 1990. Toxicological Profile for 1,1- Dichloroethane. U.S. Department of Health and Human Services, Public Health Service, Georgia, USA.

1,1-Dichloroethane Vapor Pressure HERO ID: 3981013 Table: 1 of 1

DOE, (2016). Table 1: Chemicals of Concern and Associated Chemical Information. PACs.

OECD Harmonized	Vapor Pressure	rable 1. Chemicals of Concern and 713300	rated Chemical I	mornadon. 1710s.
Template: HERO ID:	3981013			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		75 - mm Hg		
CASRN and Test Material		75-34-3; 1,1-dichloroethane		
Confidentiality, Type, and	Guideline	none; not specified; not specified		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR Notes: NR		
Temperature		1°C		
System		not reported		
Standard Deviation Results	s	not reported		
Results Details		not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.

Overall Quality Determination High

Models

Databases

Metric 5:

Metric 6:

Study Citation:

Domain 3: Other

High

N/A

specific source not reported.

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

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

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

1,1-Dichloroethane Vapor Pressure HERO ID: 4293766 Table: 1 of 1

Study Citation:

Dreher, E. L., Beutel, K. K., Myers, J. D., Lübbe, T., Krieger, S., Pottenger, L. H. (2014). Chloroethanes and chloroethylenes. :1-81.

OECD Harmonized

Vapor Pressure

Template:

		EXTRACTIO	N
Parameter	Data		
Vapor Pressure	24.27 kPa		
CASRN and Test Material	75-34-3; Not Reported		
Confidentiality, Type, and Guideline	None; Experimental; Not reported	i	
Solvent, Reactivity, Storage, and Stability	Not reported; Not Reported; Not I	Reported; Not Reported	
Radiolabel, Source, State, and Purity	Not Reported; Not Reported; Not	Reported; Not Reported	
Temperature	20°C		
System	Not reported		
Standard Deviation Results	Not Reported		
Results Details	9.34 kPa at 0°C; 15.37 kPa at 10°	C; 36.95 kPa at 30°C	
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features

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

1,1-Dichloroethane Vapor Pressure HERO ID: 5926414 Table: 1 of 1

Study Citation: Elsevier, (2019). Reaxys: physical-chemical property data for 1,1-dichloroethane. CAS Registry Number: 75-34-3.. **OECD Harmonized** Vapor Pressure **Template: HERO ID:** 5926414 **EXTRACTION Parameter** Data Vapor Pressure 227.268 mm Hg CASRN and Test Material 75-34-3; 1,1-Dichloroethane Confidentiality, Type, and Guideline None; Experimental; Not reported Solvent, Reactivity, Storage, and Stability NR; NR; NR; NR Radiolabel, Source, State, and Purity NR; NR; NR; NR Temperature 25°C System Not Reported Standard Deviation Results Not Reported Results Details 8 data points were reported; 1 value was reported at 227.268 torr at standard temperature; 7 data points were outside the range, measured at non-standard or unreported temperatures. **EVALUATION** Domain Metric Rating Comments Domain 1: Substance Metric 1: Representativeness High Data are measured or estimated for the subject chemical substance. Metric 2: Appropriateness High Measured data are consistent with the subject chemical's physical/chemical properties. Domain 2: Test Reliability Metric 3: Reliability/Unbiased Medium There is no indication that the methodology for producing the information was biased

towards a particular product or outcome.

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

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

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

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

Overall Quality Determination	High
Overall Quanty Determination	111511

Databases

Models

Metric 4:

Metric 5:

Metric 6:

Domain 3: Other

(Method Objectivity)

Reliability/Analytical Method

Medium

High

N/A

^{*} Related References: Tse, Ginger; Sandler, Stanley I.; Journal of Chemical and Engineering Data; vol. 39; nb. 2; (1994); p. 354 - 357

1,1-Dichloroethane Vapor Pressure HERO ID: 1937605 Table: 1 of 1

Study Citation: Garcia-Sanchez, F., Trejo, A. (1987). Vapor-pressure and critical constants of 1,1-dichloroethane. The Journal of Chemical Thermodynamics 19(4):359-

OECD Harmonized

361. Vapor Pressure

Template:

EXT	$\Gamma \mathbf{R} \Delta$	ľ	ΓI	U.	N

Parameter	Data
Vapor Pressure	8.3E4 Pa
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; Experimental; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; under nitrogen and protected from sunlight; NR
Radiolabel, Source, State, and Purity	NR; Aldrich Chemical Co.; Liquid; 97 mole% stabilized with mole% of dioxane Notes: further purified with aq. NaHCO3 wash, dried over sieves, distilled, degassed, then freeze dried
Temperature	326.1 K
System	Determinations of the vapor pressure p for a given temperature T were carried out with an apparatus and method described in previous publications.
Standard Deviation Results	Temperature: $\pm 0.2~{\rm K}$, Pressure: $\pm 10~{\rm kPa}$.
Results Details	this source measured the pressure of 1.1-dichloroethane from 326.1K to 523.4 K which are outside the environmentally relevant range

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties.
Domain 2: Test Reliab	oility			
	Metric 3:	Reliability/Unbiased	Medium	Peer-reviewed journal, however, measurements outside of environmental relevance.
	Metric 4:	(Method Objectivity) Reliability/Analytical Method	Low	Measurements outside of environmental relevance.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qual	ity Determi	ination	High	

1,1-Dichloroethane Vapor Pressure HERO ID: 9087635 Table: 1 of 2

Study Citation: Li, M., J.C., Pitzer, K. S. (1956). The Thermodynamic Properties of 1,1-Dichloroethane: Heat Capacities from 14 to 294°K., Heatsof Fusion and Vapor-

ization, Vapor Pressure and Entropy of the Ideal Gas. The Barrier to Internal Rotation. Journal of the American Chemical Society 78(6):1077-1080.

OECD Harmonized Template:

Vapor Pressure

EXTRACTION			
	FXTR	ΔC	LIUN

Parameter	Data
Vapor Pressure	0.644 - 16.502 cm Hg
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; Experimental; None; measured using a mercury manometer
Solvent, Reactivity, Storage, and Stability	NA; NA; NR; NR
Radiolabel, Source, State, and Purity	NR; Reported as commercially available; NR; purity 99.87% by fractional distillation and recrystallization 3 times Notes: NA
Temperature	234.38 to 290.76 K
System	mercury manometer with 1.6 cm inside diameter
Standard Deviation Results	NR
Results Details	vapor pressure = 165.02 mm Hg at 290.76K

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

1,1-Dichloroethane Vapor Pressure HERO ID: 9087635 Table: 2 of 2

Study Citation:
Li, M., J.C., Pitzer, K. S. (1956). The Thermodynamic Properties of 1,1-Dichloroethane: Heat Capacities from 14 to 294°K., Heatsof Fusion and Vaporization, Vapor Pressure and Entropy of the Ideal Gas. The Barrier to Internal Rotation. Journal of the American Chemical Society 78(6):1077-1080.

Vapor Pressure

OECD Harmonized Template: HERO ID:

9087635

EXTR	ACTION

Parameter	Data
Parameter	Data
Vapor Pressure	Not Reported
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; Experimental; None; measured by vaporizing test substance through a capillary tube into a bulb immersed in liquid nitrogen
Solvent, Reactivity, Storage, and Stability	NA; NA; NR; NR
Radiolabel, Source, State, and Purity	NR; Reported as commercially available; NR; purity 99.87% by fractional distillation and recrystallization 3 times Notes: NA
Temperature	Not Reported
System	Not Reported
Standard Deviation Results	NR
Results Details	heat of vaporization 7409 \pm 7 cal/mole at 293K

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

Study Citation: National Institute of Standards and Technology (NIST), (2022). NIST Chemistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database

OECD Harmonized

No. 69. Vapor Pressure

Template:

HERO ID: 10225173

EXTRACTION

Parameter Data

Vapor Pressure Not Reported

CASRN and Test Material 75-34-3; 1,1-Dichloroethane

Confidentiality, Type, and Guideline Not Reported; Not Reported; Not Reported

Solvent, Reactivity, Storage, and Stability NR; NR; NR; NR Radiolabel, Source, State, and Purity NR; NR; NR; NR NR; NR; NR

Temperature 378 K, based on data from 363. - 535. K.

System Not Reported Standard Deviation Results Not Reported

Results Details Enthalpy of vaporization: 28.2 kJ/mol

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

^{*} Related References: Stephenson, Richard M.; Malanowski, Stanislaw, Handbook of the Thermodynamics of Organic Compounds, 1987, https://doi.org/10.1007/978-94-009-3173-2

1,1-Dichloroethane Vapor Pressure HERO ID: 10225173 Table: 2 of 14

Study Citation: National Institute of Standards and Technology (NIST), (2022). NIST Chemistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database

OECD Harmonized Vapor Pressure

Template:

Results Details

HERO ID: 10225173

EXTRACTION

Parameter	Data		
Vapor Pressure	Not Reported		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	Not Reported; Not Reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR		
Temperature	293 K		
System	Not Reported		
Standard Deviation Results	Not Reported		

Enthalpy of vaporization: 31±29 kJ/mol

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

Overall Quality Determination

Medium

^{*} Related References: Li, J.C.M.; Pitzerk, K.S., The thermodynamic properties of 1,1-dichloroethane: Heat capacities from 14 to 194°K., heats of fusion and vaporization, vapor pressure and entropy of the ideal gas. The barrier to internal rotation, J. Am. Chem. Soc., 1956, 78, 1077-10

1,1-Dichloroethane Vapor Pressure HERO ID: 10225173 Table: 3 of 14

Study Citation: National Institute of Standards and Technology (NIST), (2022). NIST Chemistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database

OECD Harmonized

No. 69. Vapor Pressure

Template:

EXTR	ACTION

Parameter	Data
Vapor Pressure	Not Reported
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	Not Reported; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR
Temperature	275 K, based on data from 234 290. K.
System	Not Reported
Standard Deviation Results	Not Reported
Results Details	Enthalpy of vaporization: 31.9 kJ/mol

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

^{*} Related References: Li, J.C.M.; Pitzer, K.S., The thermodynamic properties of 1,1-dichloroethane: Heat capacities from 14 to 194°K., heats of fusion and vaporization, vapor pressure and entropy of the ideal gas. The barrier to internal rotation, J. Am. Chem. Soc., 1956, 78, 1077-10

1,1-Dichloroethane Vapor Pressure HERO ID: 10225173 Table: 4 of 14

Study Citation: National Institute of Standards and Technology (NIST), (2022). NIST Chemistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database

OECD Harmonized V

JECD Harmoniz

No. 69. Vapor Pressure

Template:

FYTD	ACTION
LAIN	ACTION

Parameter	Data
Vapor Pressure	Not Reported
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	Not Reported; Not Reported; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Temperature	228 K, based on data from 213 330. K
System	Not Reported
Standard Deviation Results	Not Reported
Results Details	Enthalpy of vaporization: 34.4 kJ/mol

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

^{*} Related References: Stull, Daniel R., Vapor Pressure of Pure Substances. Organic and Inorganic Compounds, Ind. Eng. Chem., 1947, 39, 4, 517-540

1,1-Dichloroethane Vapor Pressure HERO ID: 10225173 Table: 5 of 14

Study Citation: National Institute of Standards and Technology (NIST), (2022). NIST Chemistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database

OECD Harmonized

No. 69. Vapor Pressure

Template:

FYTD	ACTION	ſ
LAIN.	4C I ICH	

Parameter	Data
Vapor Pressure	Not Reported
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	Not Reported; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR
Temperature	176.18 K
System	Not Reported
Standard Deviation Results	Not Reported
Results Details	Enthalpy of fusion: 7.870 kJ/mol

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

^{*} Related References: Li, J.C.M.; Pitzer, K.S., The thermodynamic properties of 1,1-dichloroethane: heat capacities from 14 to 294 K., heats of fusion and vaporization, vapor pressure and entropy of the ideal gas. The barrier to internal rotation, J. Am. Chem. Soc., 1956, 78, 1077-1080.

1,1-Dichloroethane Vapor Pressure HERO ID: 10225173 Table: 6 of 14

Study Citation: National Institute of Standards and Technology (NIST), (2022). NIST Chemistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database

OECD Harmonized

No. 69. Vapor Pressure

Template:

$\mathbf{F}\mathbf{X}\mathbf{T}$	'TP A	CT	$\mathbf{I} \mathbf{O} \mathbf{N}$	J

Parameter	Data
Vapor Pressure	Not Reported
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	Not Reported; Not Reported; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR
Temperature	176.2 K
System	Not Reported
Standard Deviation Results	Not Reported
Results Details	Enthalpy of fusion: 7.87 kJ/mol

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

^{*} Related References: Acree, William E., Thermodynamic properties of organic compounds: enthalpy of fusion and melting point temperature compilation, Thermochimica Acta, 1991, 189, 1, 37-56

1,1-Dichloroethane Vapor Pressure HERO ID: 10225173 Table: 7 of 14

Enthalpy of vaporization at standard conditions: 30.77 kJ/mol

Study Citation: National Institute of Standards and Technology (NIST), (2022). NIST Chemistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database

OECD Harmonized Vapor Pressure

Overall Quality Determination

Template:

Results Details

HERO ID: 10225173

EVTD	ACTION	
CAIK	ACTION	

Parameter	Data
Vapor Pressure	Not Reported
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	Not Reported; Not Reported; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR
Temperature	20 C
System	NR
Standard Deviation Results	Not Reported

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

^{*} Related References: Majer, V.; Svoboda, V., Enthalpies of Vaporization of Organic Compounds: A Critical Review and Data Compilation, Blackwell Scientific Publications, Oxford, 1985, 300.

Medium

1,1-Dichloroethane Vapor Pressure HERO ID: 10225173 Table: 8 of 14

Study Citation: National Institute of Standards and Technology (NIST), (2022). NIST Chemistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database

OECD Harmonized Va

No. 69. Vapor Pressure

Template:

FXTI		TTT.	TAC
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Parameter	Data
Vapor Pressure	Not Reported
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	Not Reported; Not Reported; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Temperature	20 C
System	Weighted average of several measurements plus a correction for non-ideality
Standard Deviation Results	Not Reported
Results Details	Enthalpy of vaporization at standard conditions: 30.83±0.08 kJ/mol

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

^{*} Related References: Manion, J.A., Evaluated Enthalpies of Formation of the Stable Closed Shell C1 and C2 Chlorinated Hydrocarbons, J. Phys. Chem. Ref. Data, 2002, 31, 1, 123-172, https://doi.org/10.1063/1.1420703

1,1-Dichloroethane Vapor Pressure HERO ID: 10225173 Table: 9 of 14

Study Citation: National Institute of Standards and Technology (NIST), (2022). NIST Chemistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database

OECD Harmonized

No. 69. Vapor Pressure

Template:

HERO ID: 10225173

Overall Quality Determination

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Parameter	Data
Vapor Pressure	Not Reported
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	Not Reported; Not Reported; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR
Temperature	20 C
System	Not Reported
Standard Deviation Results	Not Reported
Results Details	Enthalpy of vaporization at standard conditions: 30.62±0.14 kJ/mol

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

^{*} Related References: Laynez, J.; Wadso, I., Enthalpies of vaporization of organic compounds. IX. Some halogen substituted hydrocarbons and esters, Acta Chem. Scand., 1972, 26, 3148

High

1,1-Dichloroethane Vapor Pressure HERO ID: 10225173 Table: 10 of 14

Study Citation: National Institute of Standards and Technology (NIST), (2022). NIST Chemistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database

OECD Harmonized No. 69. Vapor Pressure

Template:

FYTD	ACTION
LAIN	ACTION

Parameter	Data
Vapor Pressure	Not Reported
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	Not Reported; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR
Temperature	20 C
System	Not Reported
Standard Deviation Results	Not Reported
Results Details	Enthalpy of vaporization at standard conditions: 30.6±0.1 kJ/mol

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

^{*} Related References: Laynez, José; Wadsö, Ingemar; Haug, Arne; Songstad, J.; Pilotti, Åke, Enthalpies of Vaporization of Organic Compounds. IX. Some Halogen Substituted Hydrocarbons and Esters., Acta Chem. Scand., 1972, 26, 3148-3152, https://doi.org/10.3891/acta.chem.scand.26-3148

1,1-Dichloroethane Vapor Pressure HERO ID: 10225173 Table: 11 of 14

Study Citation: National Institute of Standards and Technology (NIST), (2022). NIST Chemistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database

OECD Harmonized

No. 69. Vapor Pressure

Template:

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Parameter	Data
Vapor Pressure	Not Reported
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	Not Reported; Not Reported; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR
Temperature	293 K
System	Not Reported
Standard Deviation Results	Not Reported
Results Details	Enthalpy of vaporization: 31.000 kJ/mol

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

^{*} Related References: Li, J.C.M.; Pitzer, K.S., The thermodynamic properties of 1,1-dichloroethane: heat capacities from 14 to 294 K., heats of fusion and vaporization, vapor pressure and entropy of the ideal gas. The barrier to internal rotation, J. Am. Chem. Soc., 1956, 78, 1077-1080.

1,1-Dichloroethane Vapor Pressure HERO ID: 10225173 Table: 12 of 14

Study Citation: National Institute of Standards and Technology (NIST), (2022). NIST Chemistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database

OECD Harmonized Vapor Pressure

Template:

Parameter

Standard Deviation Results

HERO ID: 10225173

EXTRACTION

Vapor Pressure Not Reported

CASRN and Test Material 75-34-3; 1,1-Dichloroethane

Confidentiality, Type, and Guideline Not Reported; Not Reported; Not Reported

Data

Not Reported

Solvent, Reactivity, Storage, and Stability
Radiolabel, Source, State, and Purity
NR; NR; NR; NR
Temperature
System
NR; NR; NR
NR; NR; NR
NR; NR
NR; NR
NR; NR
NR; NR
NR
NR; NR
NR
NR; NR

Results Details Enthalpy of vaporization: 28.85 kJ/mol

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

* Related References: Majer, V.; Svoboda, V., Enthalpies of Vaporization of Organic Compounds: A Critical Review and Data Compilation, Blackwell Scientific Publications, Oxford, 1985, 300

1,1-Dichloroethane Vapor Pressure HERO ID: 10225173 Table: 13 of 14

Study Citation: National Institute of Standards and Technology (NIST), (2022). NIST Chemistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database

No. 69. **OECD Harmonized**

Template:

Vapor Pressure

EXTR	A(ТТ	ON	J

ed

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

^{*} Related References: Garcia-Sanchez, Fernando; Trejo, Arturo, Vapour pressure and critical constants of 1,1-dichloroethane, The Journal of Chemical Thermodynamics, 1987, 19, 4, 359-361, https://doi.org/10.1016/0021-9614(87)90118-2

1,1-Dichloroethane Vapor Pressure HERO ID: 10225173 Table: 14 of 14

Study Citation: National Institute of Standards and Technology (NIST), (2022). NIST Chemistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database

OECD Harmonized V

No. 69. Vapor Pressure

Template:

FYTD	ACTION
LAIN	ACTION

Parameter	Data
Vapor Pressure	Not Reported
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	Not Reported; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR
Temperature	338 K, Based on data from 323 535. K.
System	Not Reported
Standard Deviation Results	Not Reported
Results Details	Enthalpy of vaporization: 29.2 kJ/mol

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

^{*} Related References: Stephenson, Richard M.; Malanowski, Stanislaw, Handbook of the Thermodynamics of Organic Compounds, 1987, https://doi.org/10.1007/978-94-009-3173-2

1,1-Dichloroethane Vapor Pressure HERO ID: 10180525 Table: 1 of 1

Study Citation:

NCBI, (2020). PubChem Compound Summary for CID 6365: 1,1-Dichloroethane.

OECD Harmonized

Vapor Pressure

Template:

		EXTRACTIO	N
Parameter	Data		
Vapor Pressure	Not Reported		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; not specified; NA		
Solvent, Reactivity, Storage, and Stabili	ty NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR		
Temperature	NR		
System	NR		
Standard Deviation Results	NR		
Results Details	Heat of vaporization 131.6 Btu/lb (73.1	1 cal/g, 3.06x10^5 J/	kg)
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	Medium	Data measured for a structural analogue of the subject chemical substance are consistent with what is expected for the subject chemical substance structural properties, features or behaviors.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:		Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Dete	rmination	High	

^{*} Related References: Citing CAMEO chemicals, 2018.

1,1-Dichloroethane Vapor Pressure HERO ID: 192177 Table: 1 of 1

Study Citation:

NIOSH, (2007). NIOSH pocket guide to chemical hazards.

OECD Harmonized

nized Vapor Pressure

Template: HERO ID:

HERO ID:	192177			
Danamatan		Data	EXTRACTIO	N
Parameter		Data		
Vapor Pressure		182 - mm Hg		
CASRN and Test Materi	al	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, an	d Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Stora	age, and Stability	NR; NR; NR		
Radiolabel, Source, State	e, and Purity	NR; NR; NR; NR Notes: NR		
Temperature	-	NR		
System		NR		
Standard Deviation Resu	lts	NR		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliab	oility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain 3. Outer	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qual	itv Determi	nation	High	

1,1-Dichloroethane Vapor Pressure HERO ID: 8435203 Table: 1 of 1

Study Citation: OECD Harmonized	NIOSH, (1978). Vapor Pressure	. Occupational health guideline for 1,1-di	chloroethane.	
Template: HERO ID:	8435203			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		182 - mm Hg		
CASRN and Test Material		75-34-3; 1,1-DICHLOROETHANE		
Confidentiality, Type, and	Guideline	none; not specified; NR		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR Notes: NR		
Temperature	•	20C (68F)		
System		NR		
Standard Deviation Results	S	NR		
Results Details		NR		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.

Databases

Models

Metric 5:

Metric 6:

Overall Quality Determination

Domain 3: Other

Medium

N/A

High

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

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

^{*} Related References: Several references listed in the reference but not attributed to specific data.

1,1-Dichloroethane Vapor Pressure HERO ID: 5926110 Table: 1 of 1

OECD Harmonized Vapor Pressure
Template:
HERO ID: 5926110

EXTRACTION

Parameter Data

NLM, (2018). PubChem: Hazardous Substance Data Bank: 1,1-Dichloroethane, 75-34-3.

Vapor Pressure	227 mm Hg
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Tr. ,	0500

Temperature 25°C

System Not Reported
Standard Deviation Results Not Reported
Results Details Not Reported

Study Citation:

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

^{*} Related References: Daubert, T.E., R.P. Danner. Physical and Thermodynamic Properties of Pure Chemicals Data Compilation. Washington, D.C.: Taylor and Francis, 1989.

1,1-Dichloroethane HERO ID: 5159900 Table: 1 of 9

Study Citation:	RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.
OECD Harmonized	Vapor Pressure
Template:	

HERO ID:	5159900			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		25930 - Pa		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Extrapolated; Not reported		
Solvent, Reactivity, Storag		NR; NR; NR		
Radiolabel, Source, State,	-	NR; NR; NR; NR		
Temperature	ř	25 deg C		
System		NR		
Standard Deviation Result	S	NR		
Results Details		Extrapolated by the Antoine equation.		
			EVALUATIO	Ni
Domain		Metric	Rating	Comments
Domain 1: Substance		Wietite	Ruing	Comments
Domain 1. Substance	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
		11 1	<u>U</u>	J
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	Metric 4:	(Method Objectivity) Reliability/Analytical Method	Low	towards a particular product or outcome. The analytical method is unknown and there is no indication that a reliable method was
				used.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

* Related References: Primary Source: Weast 1972 - 1973

1,1-Dichloroethane Vapor Pressure HERO ID: 5159900 Table: 2 of 9

Study Citation: OECD Harmonized RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

Template:

Vapor Pressure

HERO ID:

5159900

	EXTRACTION
Parameter	Data
Vapor Pressure	30260 - Pa
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; Extrapolated; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR
Temperature	25 deg C
System	NR
Standard Deviation Results	NR
Results Details	Extrapolated by the Antoine equation.
	THE TAXABLE PARTY.

Comments
ne subject chemical substance.
e subject chemical substance structural features.
dology for producing the information was biased me.
d there is no indication that a reliable method was
ognized data collection/repository where data are are broadly available to the public for review and ginal sources.
to this kind of information.
•

^{*} Related References: Primary Source: Boublik et al. 1973 HERO ID 4140510

1,1-Dichloroethane Vapor Pressure HERO ID: 5159900 Table: 3 of 9

Study Citation: OECD Harmonized RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

OECD Harmonized Template:

Vapor Pressure

Template: HERO ID:

5159900

	EXTRACTION
Parameter	Data
Vapor Pressure	30360 - Pa
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; Extrapolated; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Temperature	25 deg C
System	NR
Standard Deviation Results	NR
Results Details	Extrapolated by the Antoine equation.

		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	(Method Objectivity)		towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other			
Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Detern	ningtion	High	

* Related References: Primary Source: Stephenson and Malanowski 1987

Study Citation: OECD Harmonized RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

Template:

Vapor Pressure

EXTRACTION

Parameter	EXTRACTION Data		
Vapor Pressure	29810 - Pa		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Extrapolated; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Temperature	25 deg C		
System	NR		
Standard Deviation Results	NR		
Results Details	Extrapolated by the Antoine equation.		

EVALUATION					
Domain		Metric	Rating	Comments	
Domain 1: Substance	;				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.	
Domain 2: Test Relia	bility				
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased	
		(Method Objectivity)		towards a particular product or outcome.	
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.	
Domain 3: Other					
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Qual	lity Determ	ination	High		

^{*} Related References: Primary Source: Stull 1947 HERO ID 41570

Study Citation: OECD Harmonized RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

Template:

HERO ID:

Vapor Pressure

5159900

	EXTRACTION
Parameter	Data
Vapor Pressure	24274 - Pa
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Temperature	20 deg C
System	NR
Standard Deviation Results	NR
Results Details	Not Reported

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Relial	bility			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qual	lity Determ	ination	High	

^{*} Related References: Primary Source: Rex 1906

Study Citation:

RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

OECD Harmonized Template:

Vapor Pressure

EXT	2 Δ (CT	IO	N

Parameter	EXTRACTION Data	
Vapor Pressure	36950 - Pa	
CASRN and Test Material	75-34-3; 1,1-Dichloroethane	
Confidentiality, Type, and Guideline	None; Experimental; Not reported	
Solvent, Reactivity, Storage, and Stability	NR; NR; NR	
Radiolabel, Source, State, and Purity	NR; NR; NR	
Temperature	30 deg C	
System	NR	
Standard Deviation Results	NR	
Results Details	Not Reported	

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliab	oility			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	3.5	(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qual	ity Determi	ination	High	

Vapor Pressure 1,1-Dichloroethane HERO ID: 5159900 Table: 7 of 9

Study Citation: OECD Harmonized RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

Template:

HERO ID: 5159900

Vapor Pressure

		EXTRACTION	
Parameter	Data		
Vapor Pressure	30100 - Pa		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Temperature	25 deg C		
System	NR		
Standard Deviation Results	NR		
Results Details	Not Reported		
		EVALUATION	
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other			
Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination

NEED TO FIX

^{*} Related References: Primary Source: Neely 1976 HERO ID 18866

Study Citation: OECD Harmonized RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

OECD Harmonized Template:

Vapor Pressure

HEDO ID.

HERO ID:	5159900			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		30100 - Pa		
CASRN and Test Mater	rial	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, a	and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Sto	orage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, Sta	ate, and Purity	NR; NR; NR; NR		
Temperature		25 deg C		
System		NR		
Standard Deviation Res	sults	NR		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	e			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Relia	ability			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination

High

^{*} Related References: Primary Source: Dilling 1977 HERO ID 18370

Study Citation: OECD Harmonized RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

Template:

Vapor Pressure

HERO ID:	5159900			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		30260 - Pa		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Gu	ideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, a		NR; NR; NR; NR		
Radiolabel, Source, State, and	d Purity	NR; NR; NR; NR		
Temperature	•	25 deg C		
System		NR		
Standard Deviation Results		NR		
Results Details		Not Reported		
			EVALUATIO	- '
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliability	y			
,	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
D : 2 O.1				
Domain 3: Other	3.6	D . 1	TT' 1	
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
				=

* Related References: Primary	Source	Boublik et al	1984 HFRO ID 194873
Related References. I filliar y	Bource.	Doublik et al.	1707 HERO ID 177013

Models

Metric 6:

Overall Quality Determination

N/A

High

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

Vapor Pressure 1,1-Dichloroethane HERO ID: 5926256 Table: 1 of 1

Study Citation: OECD Harmonized	RSC, (2019). Ch Vapor Pressure	emSpider: 1,1-Dichloroethane.		
Template: HERO ID:	5926256			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		182 mm Hg		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage		NR; NR; NR; NR		
Radiolabel, Source, State,	-	NR; NR; NR; NR		
Temperature		Not Reported		
System		Not Reported		
Standard Deviation Results	1	Not Reported		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	itv			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a publicly available database that references a peer-reviewed source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination

High

^{*} Related References: NIOSH

1,1-Dichloroethane Vapor Pressure HERO ID: 6655446 Table: 1 of 1

Study Citation:

Rumble, J. R. (2018). Flammability of chemical substances. :16-16 - 16-32.

OECD Harmonized

Vapor Pressure

Template: HERO ID:

HERO ID: 6655446

			EXTRACTIO	N
Parameter		Data	EXTRACTIO	N
		Data		
Vapor Pressure		= 30.5 kPa		
CASRN and Test Materi	al	Not Reported; 1,1-Dichloroethane		
Confidentiality, Type, an	d Guideline	none; experimental; Not Reported		
Solvent, Reactivity, Stora		NR; NR; NR		
Radiolabel, Source, State	e, and Purity	NR; NR; NR; NR		
Геmperature		25°C		
System		Not reported		
Standard Deviation Resu	ılts	Not reported		
Results Details		Not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliab	bility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's
	Tricule 1.	Rendomey// mary near Method	Wiedium	inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
- 2 	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qual	ity Determi	nation	High	

1,1-Dichloroethane logKow HERO ID: 5155634 Table: 1 of 1

Study Citation:			ment (OEHHA) (20	03). Public health goals for chemicals in drinking water: 1,1-dichloroethane
OECD Harmonized	in drinking wat logKow	er.		
Template:	logitow			
HERO ID:	5155634			
			EXTRACTION	
Parameter		Data		
log k _{ow}		1.79		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; calculation; NR		
Solvent, Reactivity, Storag	e, and Stability	NA; NA; NA; NA		
Radiolabel, Source, State,	and Purity	NA; NA; NA Notes: NA		
Temperature		NA		
System		NA		
pН		NA		
Results Details Method		NA		
Standard Deviation Result	S	1 (for kow)		
Results Details		Reported as Kow = 62 ± 1 (unitless). Report	ted values are mean a	nd standard deviation of the values found in a handbook.
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	TT: _1_	
		-	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabi	Metric 2:	-	_	
Domain 2: Test Reliabi	Metric 2:	Appropriateness Reliability/Unbiased	_	Measured data are consistent with the subject chemical substance structural features. There is no indication that the methodology for producing the information was biased.
Domain 2: Test Reliabi	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
	Metric 2: lity Metric 3:	Appropriateness Reliability/Unbiased (Method Objectivity)	High Medium	Measured data are consistent with the subject chemical substance structural features. There is no indication that the methodology for producing the information was biased towards a particular product or outcome. The analytical method is unknown but is likely to be appropriate based on the data's
Domain 2: Test Reliabi Domain 3: Other	Metric 2: lity Metric 3: Metric 4:	Appropriateness Reliability/Unbiased (Method Objectivity) Reliability/Analytical Method	High Medium Medium	Measured data are consistent with the subject chemical substance structural features. There is no indication that the methodology for producing the information was biased towards a particular product or outcome. The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
	Metric 2: lity Metric 3:	Appropriateness Reliability/Unbiased (Method Objectivity)	High Medium	Measured data are consistent with the subject chemical substance structural features. There is no indication that the methodology for producing the information was biased towards a particular product or outcome. The analytical method is unknown but is likely to be appropriate based on the data's

^{*} Related References: Citing Mackay, D; Shiu, WY; Ma, KC (1993) Illustrated handbook of physical-chemical properties and environmental fate for organic chemicals. Volume I.

Overall Quality Determination

Medium

1,1-Dichloroethane logKow HERO ID: 5926414 Table: 1 of 1

Elsevier, (2019). Reaxys: physical-chemical property data for 1,1-dichloroethane. CAS Registry Number: 75-34-3...

OECD Harmonized logKow **Template: HERO ID:** 5926414 **EXTRACTION** Data Parameter 1.75 - 1.8 log kow CASRN and Test Material 75-34-3; 1,1-Dichloroethane Confidentiality, Type, and Guideline None; Experimental; Not Reported Solvent, Reactivity, Storage, and Stability NR; NR; NR; NR Radiolabel, Source, State, and Purity NR; NR; NR; NR Temperature Not Reported System Not Reported Not Reported pН Results Details Method Not Reported Standard Deviation Results Not Reported Results Details @ 25 C; 9 data points were reported; 4 of these values were reported in the range of 1.75-1.8 at standard temperature; 5 data points were outside the range of measured at non-standard or unreported temperatures.

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

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

Study Citation:

logKow 1,1-Dichloroethane HERO ID: 654554 Table: 1 of 1

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

		EXTRACTIO	N
Parameter	Data		
$\log k_{ow}$	1.78		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Calculation; Not Reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Temperature	Not reported		
System	Not reported		
рН	Not reported		
Results Details Method	Not reported		
Standard Deviation Results	Not reported		
Results Details	calculated Pow-values -MedChem-Softw	vare 1989	
		EVALUATIO	
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	Medium	Calculated data consistent with the subject chemical substance structural features.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-
wiente 3.	(Method Objectivity)	mgn	tion, and the methodology's objective is clear.
Metric 4:	Reliability/Analytical Method	N/A	This matrix is not applicable to this calculated data.
monte i.	Temaning/Timing from Method	1 1/2 1	The mann is not approache to any entention data.
Domain 3: Other			
Metric 5:	Databases	N/A	This matrix is not applicable to this calculated data.
Metric 6:	Models	High	The model had a defined, unambiguous endpoint and the model performance was known.

Study Citation: OECD Harmonized	NLM, (2018). logKow	PubChem: Hazardous Substance Data B	ank: 1,1-Dichloro	ethane, 75-34-3.
Template:	logKow			
HERO ID:	5926110			
			EXTRACTIO	N
Parameter		Data		
log k _{ow}		1.79		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and		None; Experimental; Not Reported		
Solvent, Reactivity, Storag	-	NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR		
Temperature		Not Reported		
System		Not Reported		
pН		Not Reported		
Results Details Method		Not Reported		
Standard Deviation Results	S	Not Reported		
Results Details		Not Reported		
			EVALUATION	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
D 2. Oth				
Domain 3: Other	Metric 5:	Databases	High	Data is from a publicly available database that provides references to a peer-reviewed source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Datarmi	nation	High	
Over all Quali	ty Determin	เมลมงม	mgn	

^{*} Related References: Hansch, C., Leo, A., D. Hoekman. Exploring QSAR - Hydrophobic, Electronic, and Steric Constants. Washington, DC: American Chemical Society, 1995, p. 4

Study Citation: OECD Harmonized	RIVM, (2007). logKow	Ecotoxicologically based environmental	l risk limits for se	veral volatile aliphatic hydrocarbons. :217.
Template: HERO ID:	5159900			
			EXTRACTIO	N
Parameter		Data		
log k _{ow}		1.92 -		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; experimental; Not reported		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State, and Purity		NR; NR; NR; NR Notes: NR		
Temperature	·	NR		
System		NR		
pН		NR		
Results Details Method		NR		
Standard Deviation Results	S	NR		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: Primary Source: Hansch and Leo 1979 HERO ID 9837

Study Citation:

RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

OECD Harmonized Template:

logKow

HERO ID:

5159900

HERO ID:	5159900			•
D		D-4	EXTRACTIO	N
Parameter		Data		
$\log k_{ow}$		1.68 -		
CASRN and Test Material	1	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; experimental; Not reported		
Solvent, Reactivity, Storag		NR; NR; NR		
Radiolabel, Source, State,	•	NR; NR; NR Notes: NR		
Temperature	ř	NR		
System		NR		
рH		NR		
Results Details Method		NR		
Standard Deviation Result	ts	NR		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabi	liter			
Domain 2. Test Kelladi	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	wienie J.	(Method Objectivity)	MEGIUIII	towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was
				used.
Di 2. Odb				
Domain 3: Other	Matria E.	Detalesses	TT: _1	
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overell Orel	ty Dotonni	nation	Uich	
Overall Quali	ty Determi	เมลนบม	High	

^{*} Related References: Primary Source: Bhatia and Sandler 1995

1,1-Dichloroethane logKow HERO ID: 5159900 Table: 3 of 5

Study Citation:

RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

OECD Harmonized Template:

HERO ID: 5159900

	EXTRACTION
Parameter	Data
$\log k_{ow}$	1.89 -
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR Notes: NR
Temperature	NR
System	NR
**	ATD.

Temperature NR
System NR
pH NR
Results Details Method NR
Standard Deviation Results NR

logKow

Results Details Infinite dilution activities.

	EVALUATIO:	N
Metric	Rating	Comments
Representativeness	High	Data are measured or estimated for the subject chemical substance.
Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
Models	N/A	Rating of this factor is not applicable to this kind of information.
nination	High	
	Representativeness Appropriateness Reliability/Unbiased (Method Objectivity) Reliability/Analytical Method Databases	Metric Rating Representativeness High Appropriateness High Reliability/Unbiased Medium (Method Objectivity) Reliability/Analytical Method Low Databases High Models N/A

^{*} Related References: Primary Source: Tse and Sandler 1994

Study Citation: OECD Harmonized RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

OECD Harmonized Template:

logKow

Template: HERO ID:

5159900

		EXTRACTIO	N
Parameter	Data		
$\log k_{ow}$	1.79 -		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR		
Temperature	NR		
System	Shake flask		
pH	NR		
Results Details Method	GC		
Standard Deviation Results	NR		
Results Details	Not Reported		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased

	Metric 6:	Models	N/A	use OR includes references to the original sources. Rating of this factor is not applicable to this kind of information.
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and
Domain 3: Other				
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method was reported in low detail.
	Metric 5:	(Method Objectivity)	Medium	towards a particular product or outcome.

^{*} Related References: Primary Source Hansch et al. 1975 HERO ID 29212

1,1-Dichloroethane logKow HERO ID: 5159900 Table: 5 of 5

Study Citation: OECD Harmonized RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

Template:

HERO ID: 5159900

logKow

	EXTRACTION
Parameter	Data
$\log k_{ow}$	1.82 -
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR Notes: NR
Temperature	NR
System	NR
pH	NR
Results Details Method	NR
Standard Deviation Results	NR
Results Details	Not Reported

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	;			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Relia	bility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qua	lity Determi	ination	High	

^{*} Related References: Primary Source: Bhatia and Sandler 1995

1,1-Dichloroethane logKow HERO ID: 5926139 Table: 1 of 1

U.S. EPA, (2019). Chemistry Dashboard Information for 1,1-Dichloroethane. 75-34-3..

OECD Harmonized logKow Template: **HERO ID:** 5926139 **EXTRACTION** Data Parameter log kow 1.79 CASRN and Test Material 75-34-3; 1,1-Dichloroethane Confidentiality, Type, and Guideline None; Experimental; Not Reported Solvent, Reactivity, Storage, and Stability NR; NR; NR; NR Radiolabel, Source, State, and Purity NR; NR; NR; NR Temperature Not Reported System Not Reported pН Not Reported Results Details Method Not Reported Standard Deviation Results Not Reported Results Details Not Reported

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

^{*} Related References: PhysProp. Hansch, C et al. 1995

Study Citation:

1,1-Dichloroethane Water Solubility HERO ID: 5155634 Table: 1 of 1

Study Citation: California Office of Environmental Health Hazard Assessment (OEHHA) (2003). Public health goals for chemicals in drinking water: 1,1-dichloroethane in drinking water.

OECD Harmonized

Water Solubility

Template:

HERO ID: 5155634

	EXTRACTION
Parameter	Data
Water Solubility	5170 mg/L
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; calculation; NA
Solvent, Reactivity, Storage, and Stability	NA; NA; NA
Radiolabel, Source, State, and Purity	NA; NA; NA Notes: NA
Temperature	NA
System	NA
pН	NA
Results Details Method	NA
Standard Deviation Results	313
Results Details	Reported values are mean and standard deviation of the values found in a handbook.

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

Overall Quality Determination Medium

^{*} Related References: Citing Mackay, D; Shiu, WY; Ma, KC (1993) Illustrated handbook of physical-chemical properties and environmental fate for organic chemicals. Volume I.

1,1-Dichloroethane Water Solubility HERO ID: 7309759 Table: 1 of 1

Study Citation:

Canada,, G.o. (2021). Fact sheet: 1,1-dichloroethane.

OECD Harmonized

Water Solubility

Template:

HERO ID: 7309759

		EXTRACTIO	N
Parameter	Data		
Water Solubility	5,000 - mg/L		
CASRN and Test Material	75-34-3; 1,1-dichloroethane		
Confidentiality, Type, and Guideline	none; not specified; NR		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: moderately sol	uble	
Temperature	room temperature		
System	NR		
Н	NR		
Results Details Method	NR		
Standard Deviation Results	NR		
Results Details	Not Reported		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	High	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Citing Agency for Toxic Substances and Disease Registry (ATSDR), 1990. Toxicological Profile for 1,1- Dichloroethane. U.S. Department of Health and Human Services, Public Health Service, Georgia, USA.

Water Solubility 1,1-Dichloroethane HERO ID: 1739466 Table: 1 of 1

Study Citation: Chen, F.,ei, Freedman, D. L., Falta, R. W., Murdoch, L. C. (2012). Henry's law constants of chlorinated solvents at elevated temperatures. Chemosphere

86(2):156-165. Water Solubility

OECD Harmonized

Template:

HERO ID: 1739466

FYTR	ACTION

Parameter	EXTRACTION Data
Water Solubility	5403 - 5471 mg/L
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR
Radiolabel, Source, State, and Purity	NR; TCI; NR; NR
Temperature	8-75°C
System	Sufficient amount neat liquid added to 160 mL bottle containing 150 mL DDI water - nonaqueous phase of chemical present. Incubated 1 week
pH	Not Reported
Results Details Method	The headspace concentrations by GC. Using externally prepared standards for each compound
Standard Deviation Results	0.40-3.85%
Results Details	$8~{\rm deg}~C,~5403~{\rm mg/L},~0.40\%{\rm SD}21~{\rm deg}~C,~5490~{\rm mg/L},~2.65\%{\rm SD}35~{\rm deg}~C,~5265~{\rm mg/L},~2.92\%{\rm SD}60~{\rm deg}~C,~5434~{\rm mg/L},~3.47\%{\rm SD}75~{\rm deg}~C,~5471~{\rm mg/L},~3.85\%{\rm SD}$

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabi	ility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is non-standard but is expected to be appropriate.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination

High

1,1-Dichloroethane Water Solubility HERO ID: 4293766 Table: 1 of 1

Study Citation:

Dreher, E. L., Beutel, K. K., Myers, J. D., Lübbe, T., Krieger, S., Pottenger, L. H. (2014). Chloroethanes and chloroethylenes. :1-81.

OECD Harmonized

Water Solubility

Template:

			EXTRACTIO	N
Parameter		Data		
Water Solubility		5500 mg/L		
CASRN and Test Material		75-34-3; Not Reported		
Confidentiality, Type, and Guidel	ine	None; Experimental; Not Reported		
Solvent, Reactivity, Storage, and	Stability	Not reported; Not reported; Not reported	; Not reported	
Radiolabel, Source, State, and Pu	rity	Not reported; Not reported; Not reported	; Not reported Not	es: Not reported
Temperature		20°C		
System		Not reported		
рН		Not reported		
Results Details Method		Not reported		
Standard Deviation Results		Not reported		
Results Details		Reported as 0.55 wt%		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	tric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Me	tric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features (e.g., presence of certain functional groups) or other physical/chemical properties.
Domain 2: Test Reliability				
•	tric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Me	tric 4:	Reliability/Analytical Method	Medium	The analytical method is non-standard but is expected to be appropriate OR the analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Me	tric 5:	Databases	High	Data is from a known data-collection, prepared by experts in the field.
Me	tric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

1,1-Dichloroethane Water Solubility HERO ID: 5926414 Table: 1 of 1

Study Citation: OECD Harmonized Elsevier, (2019). Reaxys: physical-chemical property data for 1,1-dichloroethane. CAS Registry Number: 75-34-3.. Water Solubility

Template:

HERO ID: 5926414				
		EXTRACTIO	N	
Parameter	Data			
Water Solubility	5060 mg/L			
CASRN and Test Material	75-34-3; 1,1-Dichloroethane			
Confidentiality, Type, and Guideline	None; Experimental; Not reported			
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR			
Radiolabel, Source, State, and Purity	NR; NR; NR; NR			
Temperature	25°C			
System	Not Reported			
pH	Not reported			
Results Details Method	Reported as 0.506 g in 100 g H2O at 25	C		
Standard Deviation Results	Not Reported			
Results Details	10 data points were reported in Reaxys; 1 value was reported at 0.506 g/100 g H2O at standard temperature; 9 data points were non-standard temperatures.			
		EVALUATIO	N .	
Domain	Metric	Rating	Comments	
Domain 1: Substance				
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.	
Domain 2: Test Reliability				
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.	
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.	
Domain 3: Other				
Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.	
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Quality Determ	ination	High		

^{*} Related References: Gross; Journal of the American Chemical Society; vol. 51; (1929); p. 2365; Ph.Ch.; vol. 6; p. 218

Water Solubility 1,1-Dichloroethane HERO ID: 654554 Table: 1 of 1

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

Water Solubility

Template: HERO ID:	654554			
			EXTRACTIO	N
Parameter		Data		
Water Solubility		5057 mg/L		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Gui	deline	None; Calculation; Not reported		
Solvent, Reactivity, Storage, and		NR; NR; NR		
Radiolabel, Source, State, and		NR; NR; NR; NR		
Temperature	Turity	Not reported		
System		Statistical estimation in relation to partiti	ion coefficients	
pH		Not reported	ion coemeients.	
Results Details Method		Not Reported		
Standard Deviation Results		Not Reported		
Results Details		Reported as 5.11E-2 mol/L		
ъ.		N	EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance			*** 1	
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	Medium	Calculated data consistent with the subject chemical substance structural features.
Domain 2: Test Reliability				
	Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-
		(Method Objectivity)	-	tion, and the methodology's objective is clear.
N	Metric 4:	Reliability/Analytical Method	N/A	This matrix is not applicable to this calculated data.
Domain 3: Other				
	Metric 5:	Databases	N/A	This matrix is not applicable to this calculated data.
	Metric 6:	Models	High	The model had a defined, unambiguous endpoint and the model performance was
r	vieure 0.	ivioucis	підіі	known.
Overall Quality	Determi	nation	High	

1,1-Dichloroethane Water Solubility HERO ID: 10180525 Table: 1 of 1

Study Citation:

NCBI, (2020). PubChem Compound Summary for CID 6365: 1,1-Dichloroethane.

OECD Harmonized

Water Solubility

Template:

		EXTRACTIO	N
Parameter	Data		
Water Solubility	9700 - mg/L		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; not specified; NR		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR		
Temperature	20 deg C		
System	NR		
pH	NR		
Results Details Method	NR		
Standard Deviation Results	NR		
Results Details	Reported as 0.97 wt% at 20 deg C		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	The analytical method is non-standard but is expected to be appropriate OR the analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Citing Dreher, 2014.

1,1-Dichloroethane HERO ID: 192177 Table: 1 of 1

Study Citation:

NIOSH, (2007). NIOSH pocket guide to chemical hazards.

OECD Harmonized

Water Solubility

Data 0.6 - g/100 ml 75-34-3; 1,1-Dichloroethane None; Experimental; Not reported NR; NR; NR; NR NR; NR; NR Notes: NR 68 NR NR NR NR NR NR NR NR NR	EXTRACTIO	
0.6 - g/100 ml 75-34-3; 1,1-Dichloroethane None; Experimental; Not reported NR; NR; NR; NR NR; NR; NR Notes: NR 68 NR NR NR	by weight (g/100	
75-34-3; 1,1-Dichloroethane None; Experimental; Not reported NR; NR; NR; NR NR; NR; NR Notes: NR 68 NR NR NR NR	by weight (g/100	
75-34-3; 1,1-Dichloroethane None; Experimental; Not reported NR; NR; NR; NR NR; NR; NR Notes: NR 68 NR NR NR NR	by weight (g/100	
None; Experimental; Not reported NR; NR; NR; NR NR; NR; NR Notes: NR 68 NR NR NR	by weight (g/100	
NR; NR; NR; NR NR; NR; NR Notes: NR 68 NR NR NR	by weight (g/100	
NR; NR; NR Notes: NR 68 NR NR NR	by weight (g/100	
68 NR NR NR NR	by weight (g/100	
NR NR NR NR	by weight (g/100	
NR NR NR	by weight (g/100	
NR NR	by weight (g/100	
NR	by weight (g/100	
	by weight (g/100	
		ml)
	EVALUATIO	
Metric	Rating	Comments
Representativeness	High	Data are measured or estimated for the subject chemical substance.
Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
(Method Objectivity)		towards a particular product or outcome.
Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
Models	N/A	Rating of this factor is not applicable to this kind of information.
-	(Method Objectivity) Reliability/Analytical Method Databases	(Method Objectivity) Reliability/Analytical Method Medium Databases Medium Models N/A

1,1-Dichloroethane Water Solubility HERO ID: 8435203 Table: 1 of 1

Study Citation:	NIOSH, (1978). Occupational health guideline for 1,1-dichloroethane.
OECD Harmonized	Water Solubility

		EXTRACTION	I
Parameter	Data		`
Water Solubility	< 1000 mg/L		
CASRN and Test Material	75-34-3; 1,1-DICHLOROETHANE		
Confidentiality, Type, and Guideline	none; not specified; NR		
Solvent, Reactivity, Storage, and Stability	water; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR		
Temperature	20C (68F)		
System	NR		
pH	NR		
Results Details Method	NR		
Standard Deviation Results	NR		
Results Details	Reported as less than 0.1 g/100 g water		
Domain	Metric	EVALUATION	
	Metric	Rating	Comments
Domain 1: Substance	D	TT: _1_	
Metric 1: Metric 2:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information.
	(Method Objectivity)		
Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other			
Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High
Wieu IC 3.	Datavases	Mediulli	designation such as peer-review, public availability, or the inclusion of references to
Metric 6:	Models	N/A	original sources.
Metric 6:	Models	IN/A	Rating of this factor is not applicable to this kind of information.

* Related References: Several references listed in the reference but not attributed to specific data.

Water Solubility 1,1-Dichloroethane HERO ID: 654558 Table: 1 of 2

Study Citation	Nirmalakhandan, N. N., Speece, R. E. (1988). Prediction of aqueous solubility of organic chemicals based on molecular structure. Environmental Science
Study Citation:	Nirmalakhandan, N. N., Speece, R. E. (1988). Prediction of aqueous solubility of organic chemicals based on molecular structure. Environmental Science

and Technology 22(3):328-338. Water Solubility

OECD Harmonized

Template:

HERO ID: 654558

HERO ID:	654558			
			EXTRACTIO	N
Parameter		Data		
Water Solubility		Not Reported		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Gu	iideline	None; Not specified; Not reported		
Solvent, Reactivity, Storage,	and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and	d Purity	NR; NR; NR; NR		
Temperature		Not Reported		
System		Not Reported		
рН		Not Reported		
Results Details Method		logS = -0.321		
Standard Deviation Results		Not Reported		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or
				other physical/chemical properties or behaviors.
Di 2. T4 D-1:-1:14				
Domain 2: Test Reliability	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the mathodology for madvaine the information was bissed
	Meure 3.	(Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate.
	Wictire 4.	Renability/Analytical Method	Wicdium	The analytical method is unknown but is likely to be appropriate.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for high des-
				ignation such as peer-review, public availability, or the inclusion of references to original
				sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
0 11 0 11		.•	TT. 1	
Overall Quality	7 Determi	nation	High	

^{*} Related References: Horvath, A.L., 1982. Halogenated Hydrocarbons., NY: Dekker

1,1-Dichloroethane Water Solubility HERO ID: 654558 Table: 2 of 2

Study Citation:			n of aqueous solu	bility of organic chemicals based on molecular structure. Environmental Science
OECD Harmonized	and Technology Water Solubilit	y 22(3):328-338.		
Template:	water Solubilit	у		
HERO ID:	654558			
			EXTRACTIO	N
Parameter		Data		
Water Solubility		Not Reported		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Not specified; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Temperature		Not Reported		
System		Not Reported		
pН		Not Reported		
Results Details Method		$\log S = -0.321$		
Standard Deviation Results		Not Reported		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for high designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Horvath, A.L., 1982. Halogenated Hydrocarbons., NY: Dekker

Overall Quality Determination

High

1,1-Dichloroethane Water Solubility HERO ID: 5926110 Table: 1 of 1

Study Citation: NLM, (2018). PubChem: Hazardous Substance Data Bank: 1,1-Dichloroethane, 75-34-3. Water Solubility

Template: HERO ID:

HERO ID: 5926110

HERO ID: 5926110			
		EXTRACTIO	N
Parameter	Data		
Water Solubility	5040 mg/L		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR		
Temperature	25°C		
System	Not Reported		
pH	Not reported		
Results Details Method	Not Reported		
Standard Deviation Results	Not Reported		
Results Details	Not Reported		
	•		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
26.4	(Method Objectivity)	3.4 T	towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	High	Data is from a publicly available database that provides references to original sources.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determine	ination	Uich	
Overall Quality Determi	เมลนบม	High	

^{*} Related References: Horvath, A et al. 1999. J Phys Chem Ref Data. 128: 395-623.

1,1-Dichloroethane Water Solubility HERO ID: 5926374 Table: 1 of 1

Study Citation: OECD Harmonized O'Neil, M. J. (2013). Ethylidene chloride. 75-34-3. [1,1-Dichloroethane]. :705. Water Solubility

Template:

HERO ID: 5926374

EXTRACTION				
Parameter	Data			
Water Solubility	5000 mg/L			
CASRN and Test Material	75-34-3; 1,1-Dichloroethane			
Confidentiality, Type, and Guideline	None; Experimental; Not reported			
Solvent, Reactivity, Storage, and Stability	NR; NR; NR			
Radiolabel, Source, State, and Purity	NR; NR; NR			
Temperature	Not Reported			
System	Not Reported			
рН	Not reported			
Results Details Method	Originally reported as soluble in 200 par	ts water		
Standard Deviation Results	Not Reported			
Results Details	Not Reported			
		EVALUATIO	Ni	
Domain	Metric	Rating	Comments	
Domain 1: Substance	, include	Tutting	Comments	
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.	
Domain 2: Test Reliability				
Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased	
	(Method Objectivity)	1.10010111	towards a particular product or outcome.	
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.	
Domain 3: Other				
Metric 5:	Databases	High	Data is from a peer-reviewed data collection.	
	Models	N/A	Rating of this factor is not applicable to this kind of information.	

^{*} Related References: O'Neil, M.J. (Ed.). 2013. The Merck Index - An Encyclopedia of Chemicals, Drugs, and Biologicals. Cambridge, UK: Royal Society of Chemistry. P. 705.

1,1-Dichloroethane Water Solubility HERO ID: 5159900 Table: 1 of 9

Study Citation:	RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.
OECD Harmonized	Water Solubility
Template.	

UEDO ID. 5150000

			EXTRACTIO	N
Parameter		Data		
Water Solubility		5100 - mg/L		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guid	deline	None; experimental; Not reported		
Solvent, Reactivity, Storage, ar		NR; NR; NR		
Radiolabel, Source, State, and	-	NR; NR; NR; NR Notes: NR		
Temperature	•	25 deg C		
System		NR		
рH		NR		
Results Details Method		NR		
Standard Deviation Results		NR		
Results Details		Not Reported		
			EVALUATIO	N.
Domain		Metric	Rating	Comments
Domain 1: Substance		Metric	Ruting	Comments
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliability				
•	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
N	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
N	Aetric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Primary Source: Neely 1976 HERO ID 18866

1,1-Dichloroethane Water Solubility HERO ID: 5159900 Table: 2 of 9

Study Citation:

RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

OECD Harmonized

onized Water Solubility

Template:

5159900

Parameter Water Solubility CASRN and Test Material Confidentiality, Type, and O Solvent, Reactivity, Storage		Data 4842 - mg/L	EXTRACTIO	N .
Water Solubility CASRN and Test Material Confidentiality, Type, and G		4842 - mg/L		
CASRN and Test Material Confidentiality, Type, and C	~	9		
CASRN and Test Material Confidentiality, Type, and C	~	9		
	~	75-34-3; 1,1-Dichloroethane		
	Juideline	None; experimental; Not reported		
		NR; NR; NR		
Radiolabel, Source, State, a	-	NR; NR; NR; NR Notes: NR		
Temperature	•	25 deg C		
System		NR		
pΗ		NR		
Results Details Method		NR		
Standard Deviation Results		NR		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	v Determi	nation	High	

^{*} Related References: Primary Source: Nirmalakhandan and Speece 1988 HERO ID 68101

1,1-Dichloroethane Water Solubility HERO ID: 5159900 Table: 3 of 9

Study Citation:

RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

OECD Harmonized Template:

Water Solubility

5150000

		EXTRACTIO	N
Parameter	Data		
Water Solubility	5075 - mg/L		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR		
Temperature	25 deg C		
System	NR		
pH	NR		
Results Details Method	NR		
Standard Deviation Results	NR		
Results Details	Not Reported		
		EVALUATIO	N .
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.

Overall Quality Determination

Databases

Models

Metric 5:

Metric 6:

High

N/A

High

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

use OR includes references to the original sources.

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

^{*} Related References: Primary Source: Seidell 1940

1,1-Dichloroethane Water Solubility HERO ID: 5159900 Table: 4 of 9

Study Citation:

Domain 3: Other

RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

OECD Harmonized

Water Solubility

Template:

5159900

			EXTRACTIO	N
Parameter		Data		
Water Solubility		5400 - mg/L		
CASRN and Test Material	l	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; experimental; Not reported		
Solvent, Reactivity, Storag		NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR Notes: NR		
Temperature		30 deg C		
System		NR		
pН		NR		
Results Details Method		NR		
Standard Deviation Result	S	NR		
Results Details		Volumetric		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.

Overall Quality Determination	High
Over all Quality Determination	mgn

Databases

Models

Metric 5:

Metric 6:

High

N/A

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

use OR includes references to the original sources.

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

^{*} Related References: Primary Source Rex 1906

1,1-Dichloroethane Water Solubility HERO ID: 5159900 Table: 5 of 9

Study Citation:

RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

OECD Harmonized

Water Solubility

Template: HERO ID:

5159900

		EXTRACTIO	N
Parameter	Data		
Water Solubility	5500 - mg/L		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR		
Temperature	20 deg C		
System	NR		
pH	NR		
Results Details Method	NR		
Standard Deviation Results	NR		
Results Details	Volumetric		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other			
Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determ	nination	High	

^{*} Related References: Primary Source Rex 1906

1,1-Dichloroethane Water Solubility HERO ID: 5159900 Table: 6 of 9

Study Citation:

RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

OECD Harmonized

rmonized Water Solubility

Template: HERO ID:

5159900

		EXTRACTIO	N
Parameter	Data	EATRACIIO	
1 at afficter	Data		
Water Solubility	5555 - mg/L		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; experimental; Not reported		
Solvent, Reactivity, Storage, and Stab	oility NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR		
Temperature	25 deg C		
System	NR		
pН	NR		
Results Details Method	NR		
Standard Deviation Results	NR		
Results Details	Not Reported		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric	1: Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric	2: Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliability			
Metric	3: Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
1120110	(Method Objectivity)		towards a particular product or outcome.
Metric		Low	The analytical method is unknown and there is no indication that a reliable method was
			used.
Domain 3: Other			
Metric	5: Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and
		377	use OR includes references to the original sources.
Metric	6: Models	N/A	Rating of this factor is not applicable to this kind of information.

Overall Quality Determination

High

^{*} Related References: Primary Source: Wright and Schaffer 1932 HERO ID 6836791

1,1-Dichloroethane Water Solubility HERO ID: 5159900 Table: 7 of 9

Study Citation: OECD Harmonized RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

Template:

nized Water Solubility

HERO ID: 5159900

		EXTRACTIO	ON .
Parameter	Data		
Water Solubility	5060 - mg/L		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR		
Temperature	25 deg C		
System	NR		
рН	NR		
Results Details Method	NR		
Standard Deviation Results	NR		
Results Details	Not Reported		
		EVALUATIO	N .
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.

	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Primary Source: Seidell 1941

1,1-Dichloroethane Water Solubility HERO ID: 5159900 Table: 8 of 9

Study Citation:

RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

OECD Harmonized

Water Solubility

Template:

ID: 5159900

HERO ID:	5159900			
			EXTRACTIO	N
Parameter		Data		
Water Solubility		5060 - mg/L		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and G	uideline	None; experimental; Not reported		
Solvent, Reactivity, Storage,	and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, ar	nd Purity	NR; NR; NR; NR Notes: NR		
Temperature		25 deg C		
System		NR		
pH		NR		
Results Details Method		NR		
Standard Deviation Results		NR		
Results Details		Not Reported		
			EVALUATIO:	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabilit	ty			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality	v Determi	nation	High	

* Related References: Also entered under HERO ID 5926414. Primary Source: Gross 1929

1,1-Dichloroethane Water Solubility HERO ID: 5159900 Table: 9 of 9

Study Citation:

RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

OECD Harmonized Template:

Water Solubility

Template: HERO ID:

5159900

		EXTRACTIO	N
Parameter	Data		
Water Solubility	5495 - mg/L		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR		
Temperature	25 deg C		
System	NR		
pH	NR		
Results Details Method	NR		
Standard Deviation Results	NR		
Results Details	Not Reported		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other			
Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Detern	nination	High	

^{*} Related References: Primary Source: Isnard and Lambert 1989

Water Solubility 1,1-Dichloroethane HERO ID: 5926256 Table: 1 of 1

Study Citation: OECD Harmonized RSC, (2019). ChemSpider: 1,1-Dichloroethane.

Water Solubility

Template: HERO ID:

5026256

HERO ID: 5926256					
EXTRACTION					
Parameter	Data				
Water Calabilian	(000 //				
Water Solubility CASRN and Test Material	6000 mg/L 75-34-3; 1,1-Dichloroethane				
Confidentiality, Type, and Guideline	None; Experimental; Not reported NR; NR; NR; NR				
Solvent, Reactivity, Storage, and Stability Radiolabel, Source, State, and Purity	NR; NR; NR; NR				
•					
Temperature	Not Reported				
System pH	Not Reported Not reported				
Results Details Method	Not Reported				
Standard Deviation Results	Not Reported				
Results Details	Reported as 0.6%, assumed weight percen	ıt			
Results Details	Reported as 0.0%, assumed weight percent				
		EVALUATIO	N		
Domain	Metric	Rating	Comments		
Domain 1: Substance					
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.		
Domain 2: Test Reliability					
Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased		
	(Method Objectivity)		towards a particular product or outcome.		
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu-		
			sion in a peer-reviewed/recognized database or other secondary source.		
Domain 3: Other					
Metric 5:	Databases	High	Data is from a publicly available database that references a peer-reviewed source.		
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		
Overall Quality Determi	ination	High			
Overan Quanty Determin	111411VII	mgn			

^{*} Related References: NIOSH

1,1-Dichloroethane Water Solubility HERO ID: 5932745 Table: 1 of 3

Study Citation: OECD Harmonized

Water Solubility

Rumble, J. R. (2018). Aqueous solubility and Henry's law constants of organic compounds. :5-148 - 5-177.

Template:

HERO ID: 593274	45			
		EXTRACTIO	N	
Parameter Data				
Water Solubility	6200 mg/L			
CASRN and Test Material	75-34-3; 1,1-Dichloroethane			
Confidentiality, Type, and Guideline	None; Experimental; Not reported			
Solvent, Reactivity, Storage, and Stal	•			
Radiolabel, Source, State, and Purity	NR; NR; NR; NR			
Temperature	0°C			
System	Not Reported			
рH	Not reported			
Results Details Method Originally reported as 6.2 g/kg H20, converted using CRC handbook's reported water density at 0 C.				
Standard Deviation Results Not Reported				
Results Details	Not Reported			
		EVALUATIO:	N	
Domain	Metric	Rating	Comments	
Domain 1: Substance		6		
Metric	1: Representativeness	High	Data are measured or estimated for the subject chemical substance.	
Metric	•	High	Measured data are consistent with the subject chemical's physical/chemical properties.	
Domain 2: Test Reliability				
Metric	3	Medium	There is no indication that the methodology for producing the information was biased	
Metric	(Method Objectivity)	Medium	towards a particular product or outcome.	
Metric	4: Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.	
Domain 3: Other				
Metric	5: Databases	High	Data is from a peer-reviewed data collection.	
Metric	6: Models	N/A	Rating of this factor is not applicable to this kind of information.	

Overall Quality Determination High

1,1-Dichloroethane Water Solubility HERO ID: 5932745 Table: 2 of 3

Study Citation:

Rumble, J. R. (2018). Aqueous solubility and Henry's law constants of organic compounds. :5-148 - 5-177.

OECD Harmonized

Water Solubility

Template:

EXTR		CIT	DT.	\sim	TA 1	
H.XIK	A		ш	u	IN	

Parameter	EXTRACTION Data
Water Solubility	5000 mg/L
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR
Temperature	25°C
System	Not Reported
pН	Not reported
Results Details Method	Originally reported as 5.0 g/kg H20, converted using CRC handbook's reported water density at 25 C.
Standard Deviation Results	Not Reported
Results Details	Not Reported

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

1,1-Dichloroethane Water Solubility HERO ID: 5932745 Table: 3 of 3

Study Citation:

Rumble, J. R. (2018). Aqueous solubility and Henry's law constants of organic compounds. :5-148 - 5-177.

OECD Harmonized

Water Solubility

Template: HERO ID:

5932745

EXTR	A (α	ГT	Λ	N
CALK.	\mathbf{A}			.,	IN

Parameter	Data
Water Solubility	5000 mg/L
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; Experimental; Not reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR; NR
Temperature	50°C
System	Not Reported
pH	Not reported
Results Details Method	Originally reported as 5.0 g/kg H20, converted using CRC handbook's reported water density at 50 C.
Standard Deviation Results	Not Reported
Results Details	Not Reported

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

1,1-Dichloroethane Water Solubility HERO ID: 5926139 Table: 1 of 1

Study Citation:	U.S. EPA, (2019). Chemistry Dashboard Information for 1,1-Dichloroethane. 75-34-3
OECD Harmonized	Water Solubility

Template: HERO ID:

HERO ID: 5926139			
		EXTRACTIO	N
Parameter	Data		
Water Solubility	5040 mg/L		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Temperature	Not Reported		
System	Not Reported		
pН	Not reported		
Results Details Method	Not Reported		
Standard Deviation Results	Not Reported		
Results Details	Not Reported		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
wiettie 3.	(Method Objectivity)	Medium	towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu-
			sion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	III al-	Date in from a multiple and label and the multiple and a second and the second an
Metric 5: Metric 6:		High N/A	Data is from a publicly available database that provides references to original sources.
Metric 6:	Models	IN/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determi	nation	High	
2 · 1 = 3321		8	

^{*} Related References: PhysProp. Horvath et al. 1999

Water Solubility 1,1-Dichloroethane HERO ID: 658886 Table: 1 of 1

Study Citation: Wright, D. A., Sandler, S. I., Devoll, D. (1992). Infinite dilution activity coefficients and solubilities of halogenated hydrocarbons in water at ambient

temperatures. Environmental Science and Technology 26(9):1828-1831.

OECD Harmonized Template:

Water Solubility

Water Solubility CASRN and Test Material Confidentiality, Type, and Guideline Solvent, Reactivity, Storage, and Stability Radiolabel, Source, State, and Purity Note Temperature System System PH Results Details Method Standard Deviation Results Results Details	onstant temperature. (ot reported IKS Baratron 221 AD differential pressinge (ot reported esult reported as 0.0909-0.0909 mol%./mL Metric depresentativeness	sure transducer. Th	re the equilibrium vapor pressure of dilute, gravimetrically prepared binary mixtures at the result was then plugged into two mathematical equations to give the water solubility doroethane is 98.96 g/mol; MW of water is 18.02 g/mol; assume density of water is 1
CASRN and Test Material Confidentiality, Type, and Guideline Solvent, Reactivity, Storage, and Stability Radiolabel, Source, State, and Purity Temperature System System PH Results Details Method Standard Deviation Results Results Details	5-34-3; 1,1-Dichloroethane fone; calculation; Not reported IR; NR; NR; NR IR; NR; NR; NR O°C tatic cell apparatus was designed to spe onstant temperature. fot reported IKS Baratron 221 AD differential press unge fot reported esult reported as 0.0909-0.0909 mol%. fmL Metric tepresentativeness	sure transducer. The sure tran	ne result was then plugged into two mathematical equations to give the water solubility doroethane is 98.96 g/mol; MW of water is 18.02 g/mol; assume density of water is 1
Confidentiality, Type, and Guideline Solvent, Reactivity, Storage, and Stability Radiolabel, Source, State, and Purity Temperature System PH Results Details Method Standard Deviation Results Results Details Phanish Results Details Results Details Results Details Metric 1: Metric 2: A	fone; calculation; Not reported R; NR; NR; NR; NR R; NR; NR; NR O°C tatic cell apparatus was designed to special ported as a constant temperature. The special ported are special ported as 0.0909-0.0909 mol%. The special ported as 0.0909-0.0909 mol%.	sure transducer. The sure tran	ne result was then plugged into two mathematical equations to give the water solubility doroethane is 98.96 g/mol; MW of water is 18.02 g/mol; assume density of water is 1
Solvent, Reactivity, Storage, and Stability Radiolabel, Source, State, and Purity Temperature System System PH Results Details Method Standard Deviation Results Results Details	R; NR; NR; NR R; NR; NR; NR O°C tatatic cell apparatus was designed to special posterior temperature. Its Baratron 221 AD differential pressurge of reported esult reported as 0.0909-0.0909 mol%. Incl. Metric Tepresentativeness	sure transducer. The sure tran	ne result was then plugged into two mathematical equations to give the water solubility doroethane is 98.96 g/mol; MW of water is 18.02 g/mol; assume density of water is 1
Radiolabel, Source, State, and Purity Temperature System System State, and Purity Note that the state of the	R; NR; NR; NR 0°C tatic cell apparatus was designed to special properties of reported IKS Baratron 221 AD differential pressurge for reported esult reported as 0.0909-0.0909 mol%. Metric depresentativeness	sure transducer. The sure tran	ne result was then plugged into two mathematical equations to give the water solubility doroethane is 98.96 g/mol; MW of water is 18.02 g/mol; assume density of water is 1
Temperature 22 System S pH N Results Details Method M Standard Deviation Results N Results Details Results Results Details Method M Transport M Transport Method M Transport M Transport Method M Transport M	0°C tatic cell apparatus was designed to spe onstant temperature. for reported IKS Baratron 221 AD differential press unge for reported esult reported as 0.0909-0.0909 mol%. /mL Metric depresentativeness	sure transducer. The sure tran	ne result was then plugged into two mathematical equations to give the water solubility doroethane is 98.96 g/mol; MW of water is 18.02 g/mol; assume density of water is 1
System System Some System Syst	tatic cell apparatus was designed to specionstant temperature. for reported IKS Baratron 221 AD differential pressunge for reported esult reported as 0.0909-0.0909 mol%. Metric Metric	sure transducer. The sure tran	ne result was then plugged into two mathematical equations to give the water solubility doroethane is 98.96 g/mol; MW of water is 18.02 g/mol; assume density of water is 1
Domain Domain 1: Substance Metric 2: A	onstant temperature. (ot reported IKS Baratron 221 AD differential pressinge (ot reported esult reported as 0.0909-0.0909 mol%./mL Metric depresentativeness	sure transducer. The sure tran	ne result was then plugged into two mathematical equations to give the water solubility doroethane is 98.96 g/mol; MW of water is 18.02 g/mol; assume density of water is 1
Results Details Method Standard Deviation Results Results Details Results Details Domain Domain 1: Substance Metric 1: R Metric 2: A	IKS Baratron 221 AD differential pressinge for reported esult reported as 0.0909-0.0909 mol%./mL Metric depresentativeness	. MW of 1,1-dichl EVALUATIO Rating	loroethane is 98.96 g/mol; MW of water is 18.02 g/mol; assume density of water is 1
Standard Deviation Results Results Details Domain Domain 1: Substance Metric 1: R Metric 2: A	inge fot reported esult reported as 0.0909-0.0909 mol%./mL Metric depresentativeness	. MW of 1,1-dichl EVALUATIO Rating	loroethane is 98.96 g/mol; MW of water is 18.02 g/mol; assume density of water is 1
Standard Deviation Results Results Details Domain Domain 1: Substance Metric 1: Metric 2: A	for reported esult reported as 0.0909-0.0909 mol%./mL Metric depresentativeness	EVALUATIO Rating	N .
Domain Domain 1: Substance Metric 1: R Metric 2: A	esult reported as 0.0909-0.0909 mol%./mL Metric depresentativeness	EVALUATIO Rating	N .
Domain Domain 1: Substance Metric 1: R Metric 2: A	Metric Lepresentativeness	EVALUATIO Rating	N .
Domain Domain 1: Substance Metric 1: R Metric 2: A	Metric tepresentativeness	Rating	
Domain 1: Substance Metric 1: R Metric 2: A	epresentativeness	Rating	
Domain 1: Substance Metric 1: R Metric 2: A	epresentativeness	-	Comments
Metric 1: R	•	High	
Metric 2: A	•	High	
		_	Data are measured or estimated for the subject chemical substance.
Domain 2: Test Reliability	ppropriateness	High	Measured data are consistent with the subject chemical substance structural features and
Domain 2: Test Reliability			other physical/chemical properties.
- · · · · · · · · · · · · · · · · · · ·			
Metric 3: R	eliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	Method Objectivity)		towards a particular product or outcome.
	eliability/Analytical Method	Medium	The analytical method is non-standard but is expected to be appropriate.
Domain 3: Other			
Metric 5:	Patabases	High	The information or data is from a recognized data collection/repository where data are
			peer-reviewed by experts in the field, are broadly available to the public for review and
M-4-:- (. 3	Andala	NT/A	use OR includes references to the original sources.
Metric 6: N	Iodels	N/A	Rating of this factor is not applicable to this kind of information.

1,1-Dichloroethane Flash Point HERO ID: 4293766 Table: 1 of 1

Study Citation: OECD Harmonized Dreher, E. L., Beutel, K. K., Myers, J. D., Lübbe, T., Krieger, S., Pottenger, L. H. (2014). Chloroethanes and chloroethylenes. :1-81. Flash Point

Template:

Parameter

HERO ID: 4293766

	EXTRACTION
Data	

Flash Point -12 C

CASRN and Test Material 75-34-3; Not reported

Confidentiality, Type, and Guideline None; Experimental; Not reported

Solvent, Reactivity, Storage, and Stability Not reported; Not reported; Not reported; Not reported

Radiolabel, Source, State, and Purity Not reported; Not reported; Not reported; Not reported Notes: Not reported

System Closed cup
Standard Deviation Results Not reported
Results Details Not reported

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

Flash Point HERO ID: 192177 Table: 1 of 1 1,1-Dichloroethane

Study Citation:
OECD Harmonized

Metric 5:

Databases

NIOSH, (2007). NIOSH pocket guide to chemical hazards.

				•
D		D (EXTRACTIO	N
Parameter		Data		
Flash Point		2 - F		
CASRN and Test Materia	1	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Experimental; closed cup		
Solvent, Reactivity, Stora	ge, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State	, and Purity	NR; NR; NR; NR Notes: NR		
System		closed cup		
Standard Deviation Resul	ts	NR		
Results Details		NR		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliab	ility			
	Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-
		(Method Objectivity)	-	tion, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method likely to be appropriate based on the data's inclusion in a peer- reviewed/recognized database or other secondary source.

Metric 6:	Models	N/A Rating of this factor is not applicable to this kind of information.
Overall Quality Deter	rmination	High

original sources.

Medium The data are from a source that is known but is missing elements required for High

designation such as peer-review, public availability, or the inclusion of references to

1,1-Dichloroethane Flash Point HERO ID: 5926110 Table: 1 of 4

Study Citation: OECD Harmonized	NLM, (2018). I Flash Point	PubChem: Hazardous Substance Data B	ank: 1,1-Dichloro	ethane, 75-34-3.
Template:	T lushi T omit			
HERO ID:	5926110			
			EXTRACTIO	N
Parameter		Data		
Flash Point		-10.0 C		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Experimental; Closed cup		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
System		Not Reported		
Standard Deviation Results	s	Not reported		
Results Details		-10.0°C (14.0°F)		
			EVALUATIO	N N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a publicly available, peer-reviewed database that provides references to a peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	ination	High	

^{*} Related References: Sigma-Aldrich; Safety Data Sheet for 1,1-Dichloroethane. Product Number: 36967, Version 5.4 (Revision Date 05/27/2016)

NLM, (2018). PubChem: Hazardous Substance Data Bank: 1,1-Dichloroethane, 75-34-3.

Study Citation:

OECD Harmonized Flash Point **Template: HERO ID:** 5926110 EXTRACTION **Parameter** Data Flash Point -17 C CASRN and Test Material 75-34-3; 1,1-Dichloroethane Confidentiality, Type, and Guideline None; Experimental; Closed cup Solvent, Reactivity, Storage, and Stability NR; NR; NR; NR Radiolabel, Source, State, and Purity NR; NR; NR; NR System Not Reported Standard Deviation Results Not reported Results Details -17°C (2°F)

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

^{*} Related References: National Fire Protection Association; Fire Protection Guide to Hazardous Materials. 14TH Edition, Quincy, MA 2010, p. 325-64

1,1-Dichloroethane Flash Point HERO ID: 5926110 Table: 3 of 4

Study Citation:

NLM, (2018). PubChem: Hazardous Substance Data Bank: 1,1-Dichloroethane, 75-34-3.

OECD Harmonized Template:

Flash Point

HERO ID:

5926110

EXTRACTION					
Parameter	Data				
Flash Point	14 C				
CASRN and Test Material	75-34-3; 1,1-Dichloroethane				
Confidentiality, Type, and Guideline	None; Experimental; Open cup				
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR				
Radiolabel, Source, State, and Purity	NR; NR; NR; NR				
System	Not Reported				
Standard Deviation Results	Not reported				
Results Details	14°C (open cup); -8.33 °C (closed cup)				

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

^{*} Related References: Patty's Toxicology Volumes 1-9 5th ed. John Wiley & Sons. New York, N.Y. (2001)., p. V5 108

1,1-Dichloroethane Flash Point HERO ID: 5926110 Table: 4 of 4

Study Citation: NLM, (2018). PubChem: Hazardous Substance Data Bank: 1,1-Dichloroethane, 75-34-3. Flash Point Template:

HERO ID: 5926110			
_	_	EXTRACTIO	N
Parameter	Data		
Flash Point	-5.6 C		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Open cup		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
System	Not Reported		
Standard Deviation Results	Not reported		
Results Details	22°F (open cup)		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2. Test Palishility			
Domain 2: Test Reliability	D -1: -1:1:4-/II-1-11	M - J:	
Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
36.4	(Method Objectivity)	3.6.11	towards a particular product or outcome.

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

* Related References: Lewis, R.J. Sr. (ed) Sax's Dangerous Properties of Industrial Materials. 11th Edition. Wiley-Interscience, Wiley & Sons, Inc. Hoboken, NJ. 2004., p. 1189

Study Citation: OECD Harmonized	RSC, (2019). C Flash Point	ChemSpider: 1,1-Dichloroethane.		
Template:				
HERO ID:	5926256			
			EXTRACTIO	N
Parameter		Data		
Flash Point		-16.7 C		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State, a	-	NR; NR; NR; NR		
System		Not Reported		
Standard Deviation Results	S	Not reported		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
2	Metric 5:	Databases	High	Data is from a publicly available database that provides references to the original, peer-reviewed source.
-	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

^{*} Related References: NIOSH

Study Citation: OECD Harmonized	RSC, (2019). C Flash Point	ChemSpider: 1,1-Dichloroethane.		
Template: HERO ID:	5926256			
			EXTRACTION	
Parameter		Data		
Flash Point		-10 C		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storag		NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
System		Not Reported		
Standard Deviation Results	S	Not reported		
Results Details		Not Reported		
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	tv Determi	nation	Medium	
@ U U E U U	-5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5		1.10 0210211	

^{*} Related References: SynQuest

1,1-Dichloroethane Flash Point HERO ID: 5926256 Table: 3 of 3

Study Citation: OECD Harmonized Template:	RSC, (2019). C Flash Point	ChemSpider: 1,1-Dichloroethane.		
HERO ID:	5926256			
			EXTRACTION	
Parameter		Data		
Flash Point		-6 C		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storag	ge, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
System		Not Reported		
Standard Deviation Result	S	Not reported		
Results Details		Not Reported		
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's

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

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

Data is from a publicly available secondary source with references to non-peer reviewed

Overall Quality Determination Medium

Models

Databases

Metric 5:

Metric 6:

Domain 3: Other

Medium

N/A

^{*} Related References: LabNetwork

Flash Point 1,1-Dichloroethane HERO ID: 6655446 Table: 1 of 1

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

Flash Point

Template:

			EXTRACTIO	N
Parameter		Data		
Flash Point		-17 C		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and G	uideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage,	and Stability	NR; NR; NR		
Radiolabel, Source, State, ar	nd Purity	NR; NR; NR; NR		
System		Not reported		
Standard Deviation Results		Not reported		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabili	ty			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a publicly available, peer-reviewed database that provides references to a peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

1,1-Dichloroethane Autoflammability HERO ID: 4293766 Table: 1 of 1

Study Citation: OECD Harmonized Dreher, E. L., Beutel, K. K., Myers, J. D., Lübbe, T., Krieger, S., Pottenger, L. H. (2014). Chloroethanes and chloroethylenes. :1-81. Autoflammability

Template:

		EXTRACTIO	NI .
Parameter	Data	EXTRACTIO	IN .
Auto-flammability	458 C		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not specified		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
System	Not reported		
Standard Deviation Results	Not reported		
Results Details	Not reported		
Results Value	Not Reported		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	High	Data is from a known data-collection, prepared by experts in the field.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Detern	nination	High	

1,1-Dichloroethane Autoflammability HERO ID: 5926110 Table: 1 of 1

Study Citation: OECD Harmonized NLM, (2018). PubChem: Hazardous Substance Data Bank: 1,1-Dichloroethane, 75-34-3.

Autoflammability

Template:

		EXTRACTIO	N
Parameter	Data		
Auto Gomestilles	458 C		
Auto-flammability CASRN and Test Material	75-34-3: 1.1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not specified		
Solvent, Reactivity, Storage, and Stabi	•		
Radiolabel, Source, State, and Purity	NR; NR; NR		
System	Not reported		
Standard Deviation Results	Not Reported		
Results Details	Originally reported as 856°F		
Results Value	Not Reported		
Tesuris value	1.001.capo.tou		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric	: Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2	2: Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliability			
Metric	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
11100110	(Method Objectivity)	1110010111	towards a particular product or outcome.
Metric 4		Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu-
			sion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric:	5: Databases	High	Data is from a publicly available database that provides references to a peer-reviewed
Wette	. Daniouses	111611	data collection.
Metric	i: Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Lewis, R.J. Sr. (ed) Sax's Dangerous Properties of Industrial Materials. 11th Edition. Wiley-Interscience, Wiley & Sons, Inc. Hoboken, NJ. 2004., p. 1189

1,1-Dichloroethane Autoflammability HERO ID: 6629204 Table: 1 of 2

Study Citation: OECD Harmonized	NLM, (2020). I Autoflammabil	PubChem database: compound summary ity	: 1,1-dichloroethane.	
Template:				
HERO ID:	6629204			
			EXTRACTION	
Parameter		Data		
Auto-flammability		856 F		
CASRN and Test Material		75-34-3; 1,1-DCA		
Confidentiality, Type, and	Guideline	None; Experimental; Not specified		
Solvent, Reactivity, Storag	ge, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
System		Not reported		
Standard Deviation Result	S	Not reported		
Results Details		Not reported		
Results Value		Not Reported		
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	Medium	

^{*} Related References: U.S. Coast Guard. 1999. Chemical Hazard Response Information System (CHRIS) - Hazardous Chemical Data. Commandant Instruction 16465.12C. Washington, D.C.: U.S. Government Printing Office.

1,1-Dichloroethane Autoflammability HERO ID: 6629204 Table: 2 of 2

Study Citation: NLM, (2020). PubChem database: compound summary: 1,1-dichloroethane. **OECD Harmonized** Autoflammability **Template: HERO ID:** 6629204 **EXTRACTION** Data **Parameter** 458 C Auto-flammability CASRN and Test Material 75-34-3; 1,1-DCA Confidentiality, Type, and Guideline None; Experimental; Not specified Solvent, Reactivity, Storage, and Stability NR; NR; NR; NR Radiolabel, Source, State, and Purity NR; NR; NR; NR System Not reported Standard Deviation Results Not reported Results Details Not reported Results Value Not Reported **EVALUATION** Domain Metric Rating Comments Domain 1: Substance Metric 1: Representativeness High Data are measured or estimated for the subject chemical substance. Metric 2: Appropriateness N/A Rating of this factor is not applicable to this kind of information. Domain 2: Test Reliability Metric 3: Reliability/Unbiased Medium There is no indication that the methodology for producing the information was biased towards a particular product or outcome. (Method Objectivity) Metric 4: Reliability/Analytical Method Low The analytical method is unknown and there is no indication that a reliable method was Domain 3: Other Metric 5: Databases Medium The data are from a source that is known but is missing elements required for High

Overall Quality Determination

Metric 6:

Models

N/A

Medium

original sources.

designation such as peer-review, public availability, or the inclusion of references to

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

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

Autoflammability 1,1-Dichloroethane HERO ID: 6655446 Table: 1 of 1

Study Citation:

Rumble, J. R. (2018). Flammability of chemical substances. :16-16 - 16-32.

OECD Harmonized

Autoflammability

Template:

HERO ID:	6655446			
			EXTRACTIO	N
Parameter		Data		
Auto-flammability		458 C		
CASRN and Test Material	[75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; not specified; Not reported		
Solvent, Reactivity, Storag		NR; NR; NR		
Radiolabel, Source, State,		NR; NR; NR; NR		
System		Not reported		
Standard Deviation Result	is	Not reported		
Results Details		Not reported		
Results Value		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer- reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain J. Other	Metric 5:	Databases	High	Data is from a known data-collection, prepared by experts in the field.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
	1.101110 0.	11104015	1 1/1 1	rating of this factor is not appreade to this kind of information.
Overall Quali	ty Determi	nation	High	

1,1-Dichloroethane Viscosity HERO ID: 4293766 Table: 1 of 1

Study Citation: Dreher, E. L., Beutel, K. K., Myers, J. D., Lübbe, T., Krieger, S., Pottenger, L. H. (2014). Chloroethanes and chloroethylenes. :1-81. **OECD Harmonized** Viscosity

Template: HERO ID:

1202766

		EXTRACTIO	ON .
Parameter	Data		
Viscosity	0.38 x 10^-3		
CASRN and Test Material	75-34-3; Not Reported		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	Not reported; Not reported; Not rep	ported; Not reported	
Radiolabel, Source, State, and Purity	Not reported; Not reported; Not rep	ported; Not reported Not	tes: Not reported
Temperature	20°C		
Test Conditions	Not reported		
Standard Deviation Results	Not reported		
Results Details	Not Reported		
		EVALUATIO	N .
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliability			
Matric 3:	Paliability/Unbiased	Madium	There is no indication that the methodology for producing the information was biased

Overall Qua	lity Determ	ination	High	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 5:	Databases	High	Data is from a known data-collection, prepared by experts in the field.
Domain 3: Other				
	Wiedle 1.	Kondomey/Finary dear Method	Wiedram	inclusion in a peer-reviewed/recognized database or other secondary source.
	Metric 4:	(Method Objectivity) Reliability/Analytical Method	Medium	towards a particular product or outcome. The analytical method is unknown but is likely to be appropriate based on the data's
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
Domain 2: Test Relia	abılıty			

1,1-Dichloroethane Viscosity HERO ID: 5926414 Table: 1 of 1

Study Citation: OECD Harmonized				roethane. CAS Registry Number: 75-34-3
Template:				
HERO ID:	5926414			
			EXTRACTIO	N
Parameter		Data		
Viscosity		0.465 - 0.49		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Temperature		20-25°C		
Test Conditions		Not Reported		
Standard Deviation Result	s	Not Reported		
Results Details		At 20-25°C; 5 values were reported in R measured at non-standard temperatures.	eaxys; 4 values we	ere reported in the range of 0.465 to 0.49 at 20-25°C; 1 value was outside this range or
			EVALUATIO	N .
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
_ :::::::::::::::::::::::::::::::::::::	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

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

1,1-Dichloroethane Viscosity HERO ID: 5926110 Table: 1 of 1

Study Citation: OECD Harmonized	NLM, (2018). l Viscosity	PubChem: Hazardous Substance Data Ba	nnk: 1,1-Dichloro	ethane, 75-34-3.
Template: HERO ID:	5926110			
			EXTRACTIO	N
Parameter		Data		
Viscosity		0.464		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Temperature		25°C		
Test Conditions		Not Reported		
Standard Deviation Results	S	Not Reported		
Results Details		0.464 mPa.S		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain J. Other	Metric 5:	Databases	High	Data is from a publicly available, peer-reviewed database that provides references to a recognized data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality	ty Determi	ination	High	

^{*} Related References: Haynes, W.M. (Ed.). CRC Handbook of Chemistry and Physics. 95th Edition. CRC Press LLC, Boca Raton: FL 2014-2015, p. 6-232

1,1-Dichloroethane Viscosity HERO ID: 5932747 Table: 1 of 1

Study Citation:

Rumble, J. R. (2018). Viscosity of liquids. :6-234 - 6-237.

OECD Harmonized

Viscosity

Template: HERO ID:

IERO ID: 5932747

		EXTRACTIO	N.
Parameter	Data	EATRACTIO	11
Viscosity	0.464		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Temperature	25°C		
Test Conditions	Not Reported		
Standard Deviation Results	Not Reported		
Results Details	0.362 cP at 50°C		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	High	Data is from a peer-reviewed data collection.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
		1,71	
Overall Quality Determ	ination	High	

1,1-Dichloroethane Refractive Index HERO ID: 4293766 Table: 1 of 1

Study Citation:

Dreher, E. L., Beutel, K. K., Myers, J. D., Lübbe, T., Krieger, S., Pottenger, L. H. (2014). Chloroethanes and chloroethylenes. :1-81.

OECD Harmonized

Refractive Index

Template:

		EXTRACTIO	N	
Parameter	Data			
Refractive Index	1.4164			
CASRN and Test Material	75-34-3; Not Reported			
Confidentiality, Type, and Guideline	None; Experimental; None			
Solvent, Reactivity, Storage, and Stability		Not reported; Not reported; Not reported		
Radiolabel, Source, State, and Purity	Not reported; Not reported; Not reported		es: Not reported	
Temperature	20°C	•	•	
System	Not reported			
Standard Deviation Results	Not reported			
Results Details	Not reported			
Results Details Methods	Not reported			
Parameter	Not reported			
		EVALUATIO	N	
Domain	Metric	Rating	Comments	
Domain 1: Substance				
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.	
Domain 2: Test Reliability				
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.	
Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.	
Domain 3: Other				
Metric 5:	Databases	High	Data is from a known data-collection, prepared by experts in the field.	
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
		1 1/2 1	Taking of this factor is not apprecade to this kind of information.	
Overall Quality Determ	nination	High		

1,1-Dichloroethane Refractive Index HERO ID: 5926414 Table: 1 of 1

Study Citation:
OECD Harmonized

Elsevier, (2019). Reaxys: physical-chemical property data for 1,1-dichloroethane. CAS Registry Number: 75-34-3.. Refractive Index

Template:

		EXTRACTIO	N	
Parameter	Data			
Refractive Index	1.40572 - 1.42706			
CASRN and Test Material	75-34-3; 1,1-Dichloroethane			
Confidentiality, Type, and Guideline	None; Experimental; Not reported			
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR			
Radiolabel, Source, State, and Purity	NR; NR; NR; NR			
Temperature	20-25°C			
System	Not Reported			
Standard Deviation Results	Not Reported			
Results Details	20-25°C; 27 values were reported in Reaxys; 21 values were reported in the range of 1.40572 to 1.42706 at 20-25°C; 6 values were outside this range or measured at unreported or non-standard temperatures.			
Results Details Methods	Not Reported	1		
Parameter	Not Reported	·		
		EVALUATIO	N	
Domain	Metric	Rating	Comments	
Domain 1: Substance				
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.	
Domain 2: Test Reliability				
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.	
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.	
D : 2 04			-	
Domain 3: Other Metric 5:	Detakana	TT: _1		
	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.	
Wettic 3.				

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

1,1-Dichloroethane Refractive Index HERO ID: 5926110 Table: 1 of 1

Study Citation: NLM, (2018). PubChem: Hazardous Substance Data Bank: 1,1-Dichloroethane, 75-34-3.

OECD Harmonized Refractive Index

Template:

Parameter	Data		
	Data		
Refractive Index	1.4167		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Геmperature	20°C		
System	Not Reported		
Standard Deviation Results	Not Reported		
Results Details	Not Reported		
Results Details Methods	Not Reported		
Parameter	Not Reported		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	High	Data is from a publicly available, peer-reviewed database that provides references to a recognized data collection.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Haynes, W.M. (Ed.). CRC Handbook of Chemistry and Physics. 95th Edition. CRC Press LLC, Boca Raton: FL 2014-2015, p. 6-232

1,1-Dichloroethane Refractive Index HERO ID: 5926374 Table: 1 of 1

Study Citation: O'Neil, M. J. (2013). Ethylidene chloride. 75-34-3. [1,1-Dichloroethane]. :705. Refractive Index

Template:

		EXTRACTIO	N
Parameter	Data		
Refractive Index	1.4167		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR		
Temperature	20°C		
System	Not Reported		
Standard Deviation Results	Not Reported		
Results Details	Not Reported		
Results Details Methods	Not Reported		
Parameter	Not Reported		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	High	Data is from a publicly available, peer-reviewed database that provides references to a recognized data collection.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determine	ination	Uich	
Overall Quality Determi	เมลนงก	High	

^{*} Related References: O'Neil, M.J. (Ed.). 2013. The Merck Index - An Encyclopedia of Chemicals, Drugs, and Biologicals. Cambridge, UK: Royal Society of Chemistry. P. 705.

Refractive Index 1,1-Dichloroethane HERO ID: 5331600 Table: 1 of 1

Study Citation: OECD Harmonized Rumble, J. R. (2018). 1,1-Dichloroethane. :3-16. Refractive Index

Template:

HERO ID:	5331600			
			EXTRACTIO	N
Parameter		Data		
Refractive Index		1.4164		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR		
Radiolabel, Source, State, a	-	NR; NR; NR; NR		
Temperature	•	20°C		
System		Not Reported		
Standard Deviation Results	3	Not Reported		
Results Details		Not Reported		
Results Details Methods		Not Reported		
Parameter		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	itv			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a recognized, peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

1,1-Dichloroethane Henry's Law HERO ID: 5155634 Table: 1 of 1

Study Citation: California Office of Environmental Health Hazard Assessment (OEHHA) (2003). Public health goals for chemicals in drinking water: 1,1-dichloroethane

in drinking water.

OECD Harmonized

Henry's Law

Template:

HERO ID: 5155634

	EXTRACTION
Parameter	Data
Henry's Law	0.0054 atm-m3/mol
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; calculation; NA
Solvent, Reactivity, Storage, and Stability	NA; NA; NA; NA
Radiolabel, Source, State, and Purity	NA; NA; NA Notes: NA
Temperature	NA
pH	NA
System	NA
Standard Deviation Results	0.0009
Results Details	Reported values are mean and standard deviation of the values found in a handbook.
Results Details Methods	NA

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

Overall Quality Determination Medium

^{*} Related References: Citing Mackay, D; Shiu, WY; Ma, KC (1993) Illustrated handbook of physical-chemical properties and environmental fate for organic chemicals. Volume I.

1,1-Dichloroethane Henry's Law HERO ID: 7309759 Table: 1 of 1

Study Citation: OECD Harmonized Canada,, G.o. (2021). Fact sheet: 1,1-dichloroethane.

Henry's Law

Template:

HEDU ID 7300750

		EXTRACTIO	N
Parameter	Data		
Henry's Law	0.005 - atm·m3 /mol		
CASRN and Test Material	75-34-3; 1,1-DICHLOROETHANE		
Confidentiality, Type, and Guideline	none; not specified; NR		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR Notes: Rapid volatiliz	ation when dissolv	ed
Temperature	NR		
pH	NR		
System	NR		
Standard Deviation Results	NR		
Results Details	Reported as 5x10^-3 atm·m3 /mol		
Results Details Methods	NR		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	High	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other			
Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Citing Agency for Toxic Substances and Disease Registry (ATSDR), 1990. Toxicological Profile for 1,1- Dichloroethane. U.S. Department of Health and Human Services, Public Health Service, Georgia, USA.

1,1-Dichloroethane Henry's Law HERO ID: 1739466 Table: 1 of 1

Study Citation: Chen, F.,ei, Freedman, D. L., Falta, R. W., Murdoch, L. C. (2012). Henry's law constants of chlorinated solvents at elevated temperatures. Chemosphere

86(2):156-165.

OECD Harmonized

Henry's Law

Template:

EXTRACTION				
Parameter	Data			
Henry's Law	0.00249 - 0.0452 atm-m3/mol			
CASRN and Test Material	75-34-3; 1,1-Dichloroethane			
Confidentiality, Type, and Guideline	None; Experimental; Not Reported			
Solvent, Reactivity, Storage, and Stability	NR; NR; NR			
Radiolabel, Source, State, and Purity	NR; TCI; NR; NR			
Temperature	8-93°C			
pH	Not Reported			
System	Modified EPICS; water-saturated solution	Modified EPICS; water-saturated solutions, shaker table at room temperature overnight before measuring the headspace concentrations by GC		
Standard Deviation Results	17.1-21.0%			
Results Details Results Details Methods	8.0°C, 0.00249 atm m3/mol, 17.1 %SD; 24.0°C, 0.00551 atm m3/mol, 2.69%SD; 38.0°C, 0.00962 atm m3/mol, 3.69%SD; 58.0°C, 0.01637 atm m3/mol, 3.48%SD; 78.0°C, 0.02370 atm m3/mol, 10.1 %SD; 90.0°C, 0.02826 atm m3/mol, 6.06%SD; 91.0°C, 0.03507 atm m3/mol, 13.1 %SD; 93.0°C, 0.04523 atm m3/mol, 21.0 %SD Modified EPICS; water-saturated solutions, shaker table at room temperature overnight before measuring the headspace concentrations by GC,			
	GC-FID			
		EVALUATIO	N	
Domain	Metric	Rating	Comments	
Domain 1: Substance				
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.	
Domain 2: Test Reliability				
Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-	
	(Method Objectivity)	-	tion, and the methodology's objective is clear.	
Metric 4:	Reliability/Analytical Method	Medium	The analytical method is non-standard but is expected to be appropriate.	
Domain 3: Other				
Metric 5:	Databases	High	Data is from a recognized, peer-reviewed data collection.	
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Quality Determ	ination	High		

1,1-Dichloroethane Henry's Law HERO ID: 1937610 Table: 1 of 1

Study Citation: Gorgenyi, M., Dewulf, J., Langenhove, Van, H. (2002). Temperature dependence of Henry's law constant in an extended temperature range. Chemosphere

48(7):757-762. Henry's Law

OECD Harmonized Template:

Results Details Methods

zea -

HERO ID: 1937610

	EXTRACTION
Parameter	Data
Henry's Law	0.2390
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; Experimental; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR
Temperature	25°C
pН	Not reported
System	EPICS-SPME technique (equilibrium partitioning in closed systems-solid phase microextraction)
Standard Deviation Results	3.2%
Results Details	Source also measured HLC of 0.076 at 2°C, 0.1036 at 6°C, 0.1206 at 10°C, 0.1869 at 18°C, 0.3019 at 30°C, 0.4066 at 40°C, 0.5480 at 50°C, and

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabi	ility			
	Metric 3:	Reliability/Unbiased	High	Data reported in a peer-reviewed journal article.
		(Method Objectivity)		
	Metric 4:	Reliability/Analytical Method	Medium	The method referred to previous articles; units not stated.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a recognized, peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

EPICS-SPME technique (equilibrium partitioning in closed systems-solid phase microextraction), units not stated

1,1-Dichloroethane Henry's Law HERO ID: 5441348 Table: 1 of 1

Study Citation: Hovorka, S., Dohnal, V. (1997). Determination of air-water partitioning of volatile halogenated hydrocarbons by the inert gas stripping method. Journal of

Chemical and Engineering Data 42(5):924-933.

OECD Harmonized

Henry's Law

Template: HERO ID:

D ID: 5441348

EXTRACTION			
Parameter	Data		
Henry's Law	25.6 - MPa		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Non-guideline; Inert Gas Stripping Method		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; various suppliers; NR; 99 mol % or higher Notes: Analytical or pure grade chemical		
Temperature	293.15 K		
pН	NR		
System	Equilibrium stripping in an all-glass jacketed device with the presaturator (P) and the dilution cell (D). Constant flow of stripping gas (N2) with vigorous mixing for 2-5 hours. Equilibrium cell connected and stripping gas introduced.		
Standard Deviation Results	Relative standard errors ~1%		
Results Details	HLC defined as $\lim (x_1>0)$ solute fugacity/solute mole fraction in the liquid solution. Kaw = 191,000 (116-498 at 283.15-323.15 K); 25.6 MPa = 252.7 atm (15-72.3 MPa at 283.15-323.15), where Kaw = $\lim (\text{cwl})$ solute concentrations in air / solute concentrations in water		
Results Details Methods	gas chromatograph (GC) with a flame ionization detector (FID)		

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	e			
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.
Domain 2: Test Relia	ability			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific question, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	The analytical method is non-standard but is expected to be appropriate OR the analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Continued on next page ...

HERO ID: 5441348 Table: 1 of 1

1,1-Dichloroethane Henry's Law

... continued from previous page

Study Citation: Hovorka, S., Dohnal, V. (1997). Determination of air-water partitioning of volatile halogenated hydrocarbons by the inert gas stripping method. Journal of

Chemical and Engineering Data 42(5):924-933.

OECD Harmonized

Template:

Henry's Law

		EVALUATION		
Domain	Metric	Rating	Comments	
Overall Quality Det	ermination	High		

1,1-Dichloroethane Henry's Law HERO ID: 5926110 Table: 1 of 1

Study Citation: OECD Harmonized	NLM, (2018). F Henry's Law	PubChem: Hazardous Substance Data Ba	nk: 1,1-Dichloro	ethane, 75-34-3.
Template:	Helliy S Law			
HERO ID:	5926110			
			EXTRACTIO	N
Parameter		Data		
Henry's Law		0.00562 atm-m3/mol		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	anideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State, and Purity		NR; NR; NR; NR		
Temperature	na ranty	24°C		
pH		Not Reported		
System		Not Reported		
Standard Deviation Results		Not Reported		
Results Details		Not Reported		
Results Details Methods		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance			-	
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabili	itv			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
20	Metric 5:	Databases	High	Data is from a publicly available database that provides references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	v Determi	nation	High	

^{*} Related References: Gossett, J.M. 1987. Environ Sci Tech. 21: 202-6.

1,1-Dichloroethane Henry's Law HERO ID: 5159900 Table: 1 of 3

RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

OECD Harmonized	Henry's Law		
Template:			
HERO ID:	5159900		
		EXTRACTION	
Parameter		Data	
Henry's Law		569.0 - Pa m3/mol	
CASRN and Test Material		75-34-3; 1,1-Dichloroethane	
Confidentiality, Type, and	Guideline	None; Experimental; Not reported	
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR	
Radiolabel, Source, State,	and Purity	NR; NR; NR Notes: NR	
Temperature		NR	
pH		NR	
System		NR	
Standard Deviation Results	s	NR	
Results Details		Not Reported	
Results Details Methods		NR	

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Relia	bility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qual	lity Determ	ination	High	

^{*} Related References: Primary Source: Gossett 1987 HERO ID 732584

Study Citation:

1,1-Dichloroethane Henry's Law HERO ID: 5159900 Table: 2 of 3

Study Citation: OECD Harmonized RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

Template:

HERO ID: 5159900

Henry's Law

		EXTRACTIO	N
Parameter	Data		
Henry's Law	466.0 - Pa m3/mol		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR		
Temperature	20 deg C		
рН	NR		
System	NR		
Standard Deviation Results	NR		
Results Details	Not Reported		
Results Details Methods	NR		
_			
		EVALUATIO	
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Tast Palishility			
Domain 2: Test Reliability Metric 3:	Reliability/Unbiased	Medium	There is no indication that the mathedalegy for madvains the information was bissed
Metric 3:	(Method Objectivity)	Mediuiii	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.

Overall Quality Determination		High		
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
Domain 2: Test Relia	Metric 3: Metric 4:	Reliability/Unbiased (Method Objectivity) Reliability/Analytical Method	Medium Low	There is no indication that the methodology for producing the information was biased towards a particular product or outcome. The analytical method is unknown and there is no indication that a reliable method was used.

^{*} Related References: Primary Source: Tse et al. 1992 HERO ID 658808

1,1-Dichloroethane Henry's Law HERO ID: 5159900 Table: 3 of 3

Study Citation: OECD Harmonized RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217.

Template:

Henry's Law

HERO ID: 5159900

EXTRACTION
EXTRACTION

		EXTRACTIO	N
Parameter	Data		
Henry's Law	709.2 - Pa m3/mol		
CASRN and Test Material	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, and Purity	NR; NR; NR; NR Notes: NR		
Temperature	30 deg C		
pH	NR		
System	NR		
Standard Deviation Results	NR		
Results Details	Not Reported		
Results Details Methods	NR		
		EVALUATIO	N
Domain	Metric	Rating	Comments
Domain 1: Substance			
Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliability			
Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other			
Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determi	nation	High	

Overall Quality Determination

* Related References: Primary Source: Tse et al. 1992 658808

1,1-Dichloroethane Henry's Law HERO ID: 5932745 Table: 1 of 1

Study Citation:

Rumble, J. R. (2018). Aqueous solubility and Henry's law constants of organic compounds. :5-148 - 5-177.

OECD Harmonized

Henry's Law

Template:

HERO ID: 5932745

	EXTRACTION
Parameter	Data
Henry's Law	0.63 kPa m3/mol
CASRN and Test Material	75-34-3; 1,1-Dichloroethane
Confidentiality, Type, and Guideline	None; Experimental; Not Reported
Solvent, Reactivity, Storage, and Stability	NR; NR; NR
Radiolabel, Source, State, and Purity	NR; NR; NR
Temperature	25°C
pH	Not Reported
C	Net Demostral

pH Not Reported
System Not Reported
Standard Deviation Results Not Reported

Results Details Reported as 0.63 kPa m3 mol-1 (converted using 1 kPa = 0.00986923 atm)

Results Details Methods Not Reported

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

Study Citation:		9). Chemistry Dashboard Information for	1,1-Dichloroeth	ane. 75-34-3
OECD Harmonized	Henry's Law			
Template: HERO ID:	5926139			
			EXTRACTIO	N
Parameter		Data		
Henry's Law		0.00562 atm-m3/mol		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage		NR; NR; NR		
Radiolabel, Source, State,		NR; NR; NR; NR		
Temperature	Ť	24°C		
pН		Not Reported		
System		Not Reported		
Standard Deviation Results		Not Reported		
Results Details		Not Reported		
Results Details Methods		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	itv			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	(Method Objectivity) Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain J. Ouici	Metric 5:	Databases	High	Data is from a publicly available database that provides references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

^{*} Related References: PhysProp. Gossett, JM. 1987

1,1-Dichloroethane Dielectric Constant HERO ID: 5926414 Table: 1 of 1

OECD Harmonized Template:	Dielectric Constant						
HERO ID:	5926414						
			EXTRACTIO	N			
Parameter		Data					
CASRN and Test Material		75-34-3; 1,1-Dichloroethane					
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported					
Solvent, Reactivity, Storag	ge, and Stability	NR; NR; NR; NR					
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR					
Dielectric Constant		9.44 - 10.9					
Temperature		20-25°C					
System		Not Reported					
Results Value		Not Reported					
Results Details		@ 20-25°C; 4 values were reported in R- range or measured at unreported or non-s		alues were reported in the range of 9.44 to 10.9 at 20-25 C; 2 values were outside this res.			
			EVALUATIO	N			
Domain		Metric	Rating	Comments			
Domain 1: Substance							
	Metric 1:	Representativeness	High	Data are measured for the subject chemical substance.			
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.			
Domain 2: Test Reliabi	lity						
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.			
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.			
D : 2 04							
Domain 3: Other							

Databases

Models

Metric 5:

Metric 6:

Overall Quality Determination

High

N/A

High

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

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

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

1,1-Dichloroethane Dielectric Constant HERO ID: 5926110 Table: 1 of 1

Study Citation: OECD Harmonized	NLM, (2018). l Dielectric Cons	PubChem: Hazardous Substance Data Bar tant	nk: 1,1-Dichloro	ethane, 75-34-3.
Template: HERO ID:	5926110			
11210 121	<i>5</i> , 2 0110		EXTRACTIO	N
Parameter		Data	EXTRACTIO	14
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Dielectric Constant		10.9		
Temperature		20°C		
System		Not Reported		
Results Value		Not Reported		
Results Details		Not Reported		
			EVALUATIO	N .
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	lity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	36.4	(Method Objectivity)	3.6 12	towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a peer-reviewed, publicly available database that provides references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

^{*} Related References: Dreher E.B. et al; Chloroethanes and Chloroethylenes. Ullmann's Encyclopedia of Industrial Chemistry. 7th Ed. (1999-2018).

Overall Quality Determination

High

1,1-Dichloroethane Other Properties HERO ID: 4293766 Table: 1 of 1

Study Citation:

Dreher, E. L., Beutel, K. K., Myers, J. D., Lübbe, T., Krieger, S., Pottenger, L. H. (2014). Chloroethanes and chloroethylenes. :1-81.

OECD Harmonized

Other Properties

Template:

DXZDD	ACTION	г
HXIR	40 IION	

	EATRACTION			
Parameter	Data			
CASRN and Test Material	75-34-3; Not Reported			
Confidentiality, Type, and Guideline	None; Experimental; Not reported			
Solvent, Reactivity, Storage, and Stability	Not reported; Not reported; Not reported			
Radiolabel, Source, State, and Purity	Not reported; Not reported; Not reported Notes: Not reported			
Results Value	Heat of evaporation at 298 K: 30.8 kJ/mol			
Results Details	Not reported			
Results Remarks	Not reported			

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

PUBLIC RELEASE DRAFT July 2024

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

Term	Definition			
ASTM	American Society for Testing and Materials			
ATSDR	Agency for Toxic Substances and Disease Registry			
atm	Atmospheres			
atm · m ³ /mol	Atmospheres - cubic meters per mole			
C	Celsius			
CASRN	Chemical Abstract Service registry number			
cР	Centipoise			
CRC	CRC Handbook of Chemistry and Physics			
DOE	U.S. Department of Energy			
ECB	European Chemicals Bureau			
EPA	Environmental Protection Agency			
F	Fahrenheit			
GC	Gas Chromatography			
g/cm ³	Grams per cubic centimeter			
GLP	Good Laboratory Practice			
HLC	Henry's Law Constant			
HPV	High Production Volume			
HSDB	Hazard Substance Data Bank			
ILO	International Labour Organization			
IPCS	International Programme on Chemical Safety			
IUCLID	International Uniform Chemical Information Database			
K	Kelvin			
Koa	Octanol-Air partition coefficient			
Kow	Octanol-Water partition coefficient			
mg/L	Milligrams per Liter			
mol	Mole			
mmHg	Millimeters of Mercury			
MS	Mass Spectrometry			
N/A	Not Applicable			
NICNAS	National Industrial Chemicals Notification and Assessment Scheme			
NLM	National Library of Medicine			
NR	Not Reported			
OECD	Organisation for Economic Co-operation and Development			
Pa (hPa)	Pascals (hectopascals; 1 hPa = 100 Pa)			
pН	Negative base 10 Log of Hydrogen Ion (H+) Concentration in Aque-			
	ous Solution			
pKa	Negative base 10 Log of Acid Dissociation Constant (Ka)			
RIVM	National Institute for Public Health and the Environment (Dutch: Ri-			
	jksinstituut voor Volksgezondheid en Milieu)			
Continued on next page				

Continued on next page ... Page 190 of 191

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... continued from previous page

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