

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 1,1,2-TCE, 1,1,2-TCA, and TCE refer to the chemical 1,2-DCP refers to the chemical 1,2-dichloropropane.

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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
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5926414	Elsevier, (2019). Reaxys: physical-chemical property data for 1,1-dichloroethane. CAS Registry Number: 75-34-3	26
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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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4293766	Dreher, E. L., Beutel, K. K., Myers, J. D., Lübbe, T., Krieger, S., Pottenger, L. H. (2014). Chloroethanes and chloroethylenes. :1-81.	126			
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Study Citation: OECD Harmonized	Canada,, G.o. (2 Physical Form o	2021). Fact sheet: 1,1-dichloroethane.		
HERO ID:	7309759			
			EXTRACTIO	N
Parameter		Data		
CASRN and Test Material Confidentiality, Type, and (Guideline	75-34-3; 1,1-DICHLOROETHANE none: not specified; NR		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; liquid; NR Notes: denser that	n water	
Results Value		liquid		
Results Details		20 C		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
	Metric 5:	Databases	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	t y 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.

Study Citation:	DOE, (2016), 7	Cable 1: Chemicals of Concern and Ass	ociated Chemical I	nformation. PACs.	
OECD Harmonized	Physical Form	or State			
Template:					
HERO ID:	3981013				
			EXTRACTIO	N	
Parameter		Data			
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; NR			
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR Notes: NR			
Results Value		liquid			
Results Details		not specified			
			EVALUATIO	Ň	
Domain		Metric	Rating	Comments	
Domain 1: Substance			6		
	Metric 1:	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.	
	1.				
Domain 2: Test Reliabil	lity		Madian		
	Metric 3:	(Mathed Objectivity)	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	
	Metrie 1.	Kendonity// mary tear Wethod	Weddulli	inclusion in a peer-reviewed/recognized database or other secondary source.	
Domain 2: Other					
Domain 5: Other	Matria 5.	Databasas	High		
	Metric 5:	Databases	nigii	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.	
Ovorall Onali	Overall Quality Determination Uigh				
Over all Quali	iy Determi	11411011	Ingli		

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

Study Citation:	Dreher, E. L., Be	eutel, K. K., Myers, J. D., Lübbe, T., Kr	ieger, S., Pottenge	er, L. H. (2014). Chloroethanes and chloroethylenes. :1-81.	
OECD Harmonized	Physical Form or State				
HERO ID:	4293766				
			FXTRACTIO	Ň	
Parameter		Data	EATRACTIO		
CASRN and Test Material		75-34-3; Not reported			
Confidentiality, Type, and C	Guideline	None; Experimental; No guideline			
Solvent, Reactivity, Storage	e, and Stability	Not reported; Not reported; Not reported	d; Not reported		
Radiolabel, Source, State, a	and Purity	Not reported; Not reported; Liquid; Not	reported Notes: No	t 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 Reliabili	ity				
	Metric 3:	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information.	
	N	(Method Objectivity)	NT/ A		
	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.	
Overall Qualit	Overall Quality Determination High				

Study Citation: OECD Harmonized	NIOSH, (2007) Physical Form of	. NIOSH pocket guide to chemical haza or State	rds.	
Template:	2			
HERO ID:	192177			
			EXTRACTIO	Ň
Parameter		Data		
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, a	and Purity	NR; NR; Liquid; NR Notes: NR		
Results Value		Colorless; oily liquid; chloroform-like	odor	
Results Details		Class IB Flammable 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	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	M (
	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determination			High	

Study Citation:	NIOSH (1078)	Occupational health guideline for 1.1	dichloroethane			
OECD Harmonized	Physical Form o	r State	diemoroethane.			
Template:	5					
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; NR				
Radiolabel, Source, State, a	and Purity	NR; NR; colorless liquid; NR Notes: c	hloroform like odor			
Results Value		colorless liquid				
Results Details		NR				
Domain		Matria	EVALUATIO	Commonto		
Domain 1. Substance		Metric	Kating	Comments		
Domain 1: Substance	Matric 1:	Danrasantativanass	High	Data are manyured or actimated for the subject chemical substance		
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information		
	Meule 2.	Appropriateness	10/1	Rating of this factor is not appreade 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 5. Outer	Metric 5	Databases	Medium	The date are from a source that is known but is missing elements required for High		
	Weule 5.	Databases	Wedium	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.

Study Citation: OECD Harmonized	NLM, (2018). H Physical Form of	PubChem: Hazardous Substance Data Ba or State	nk: 1,1-Dichloro	bethane, 75-34-3.
HERO ID:	5926110			
			EXTRACTIO	N
Parameter		Data		
CASRN and Test Materia	1	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		
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 Reliabi	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	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: 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:	O'Neil, M. J. (2	013). Ethylidene chloride. 75-34-3. [1,	1-Dichloroethane]	. :705.
OECD Harmonized	Physical Form of	or State		
Template:				
HERO ID:	5926374			
			EXTRACTIO	N
Parameter		Data		
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, a	and Purity	NR; NR; NR; NR		
Results Value		oily liquid		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	ity			
Domain 2. Tost Kellauli	Metric 3.	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information
	metric 5.	(Method Objectivity)	10/11	Running of this factor is not applicable to this kind of information.
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other			•••• -	
	Metric 5:	Databases	High	Data is from a recognized data collection where data are peer-reviewed by experts in the field.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quali	ty Determi	nation	High	

	D 11 1D (2			
Study Citation:	Rumble, J. R. (2	(018). 1,1-Dichloroethane. :3-16.		
OECD Harmonized	Physical Form o	or State		
Template:				
HERO ID:	5331600			
			EXTRACTIO	N
Parameter		Data		
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, a	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 Reliabil	ity			
	Metric 3:	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information.
	Madula A.	(Method Objectivity)	NT/A	
	Metric 4:	Renability/Analytical Method	IN/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
Domain 5. Outer	Metric 5:	Databases	High	Data is from a recognized data collection where data are peer-reviewed by experts in the
	Medie 5.	Duubuses	mgn	field.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Oneli	ty Dotormi	notion	Uich	
	ly Determin		Ingii	

Study Citation:	NIM (2018) F	PubChem: Hazardous Substance Data B	ank: 1 1-Dichloro	ethane 75-34-3
OECD Harmonized	Physical Form of	or State	ank. 1,1-Diemoro	cinaic, 75-55.
Template:				
HERO ID:	5926110			
			EXTRACTIO	N
Parameter		Data		
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, a	and Purity	NR; NR; NR; NR		
Results Details		colorless, oily liquid		
			EVALUATIO	Ň
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)	1011	rading of and factor is not approache to and find 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)

Study Citation: OECD Harmonized	NLM, (2018). P Physical Form o	ubChem: Hazardous Substance Data E r State	ank: 1,1-Dichloro	ethane, 75-34-3.
Template: HFRO ID:	5926110			
	5720110			
Donomotor		Data	EXTRACTIO	N
		Data		
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		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 Reliabil	ity			
	Metric 3:	Reliability/Unbiased	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 Qualit	ty Determin	nation	High	

* 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

Study Citation: OECD Harmonized	NLM, (2018). Pr Physical Form of	ubChem: Hazardous Substance Data E r State	Bank: 1,1-Dichloro	ethane, 75-34-3.
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	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	nd 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 Reliabil	ity			
	Metric 3:	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 4:	(Method Objectivity) Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other				
	Metric 5:	Databases	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 Qualit	y Determin	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	NLM, (2018). P Physical Form o	ubChem: Hazardous Substance Data E r State	ank: 1,1-Dichloro	ethane, 75-34-3.
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	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Results Details		ether-like odor		
			EVALUATIO	Ň
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)	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 Qualit	ty Determin	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

Study Citation:	California Office of H derive unit risk and ca	Environmental Health Hazard Assessment (OEHHA) (2011). Appendix B: Chemical-specific summaries of the information used to cancer potency values.
OECD Harmonized	Melting Point	
Template:	-	
HERO ID:	5155632	
		EXTRACTION
Parameter	I	Data
Melting Point	-	-96.7 °C
CASRN and Test Material	7	75-34-3; 1,1-DICHLOROETHANE
Confidentiality, Type, and C	Guideline n	none; not specified; Not reported
Solvent, Reactivity, Storage	e, and Stability N	NR; NR; NR
Radiolabel, Source, State, a	and Purity N	NR; NR; NR Notes: NR
Results Details Methods	Ν	NR
Standard Deviation Results	Ν	NR
Results Details	Ν	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 Reliab	vility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	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: Citing ATSDR 1990, HERO ID 644890.

Study Citation:	California Office of	of Environmental Health Hazard Asses	sment (OEHHA) (200	3). Public health goals for chemicals in drinking water: 1,1-dichloroethane
OECD Harmonized	Melting Point			
Template:	U			
HERO ID:	5155634			
			EXTRACTION	
Parameter		Data		
		07.00		
Melting Point CASDN and Test Material		-9/ °C		
Capfidentiality Type and	Zuidalina	None: calculation: NA		
Solvent Reactivity Storage	and Stability	Note, calculation, NA		
Padiolabel Source State	and Durity	NA, NA , NA , NA		
Results Details Methods	ulu I ulity	NA, NA, NA, NA NOUS. NA NA		
Standard Deviation Results		0.3		
Results Details		Reported values are mean and standard d	leviation of the values fou	ind in a handbook
		reported values are mean and station of		
			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 (Method Objectivity)	Medium	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 5: 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.

	~ . ~ ~			
Study Citation:	Canada,, G.o. (2 Malting Daint	021). Fact sheet: 1,1-dichloroethane.		
Template.	Menning Folint			
HERO ID:	7309759			
	1007107			N
Parameter		Data	EXTRACTIO	N
		Data		
Malting Doint		07 °C		
CASEN and Test Material		-97 - C 75-34-3: 1 1-DICHI OPOETHANE		
Confidentiality Type and C	uidalina	none: not specified: NP		
Solvent Reactivity Storage	and Stability	NR · NR · NR · NR		
Radiolabel Source State a	nd Purity	NR: NR: NR: NR Notes: NR		
Results Details Methods	na runny	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 Reliabili	tv			
	Metric 3:	Reliability/Unbiased	High	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)	e	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 5. Outer	Metric 5	Databases	Medium	The data are from a source that is known but is missing elements required for High
	Wietrie 5.	Databases	Wiedium	designation such as peer-review, public availability, or the inclusion of references to
	Metric 6	Models	N/A	original sources. Rating of this factor is not applicable to this kind of information
	metric 0.	models	11/11	rading of any factor is not appreade to this kind of information.
Overall Qualit	y 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.

Study Citation: OECD HarmonizedDOE, (2016). Table 1: Chemicals of Conc Melting PointTemplate: HERO ID:3981013ParameterData	ern and Associated Chemical I EXTRACTIO	nformation. PACs.
OECD Harmonized Template: HERO ID:Melting PointParameterJ981013ParameterData	EXTRACTIO	
Template: HERO ID:3981013ParameterData	EXTRACTIO	N
HERO ID: 3981013 Parameter Data	EXTRACTIO	N
Parameter Data	EXTRACTIO	NT
Parameter Data		21
Melting Point -96.9 - °C		
CASRN and Test Material 75-34-3; 1,1-dichloroeth	ane	
Confidentiality, Type, and Guideline none; not specified; none		
Solvent, Reactivity, Storage, and Stability NR; NR; NR; NR		
Radiolabel, Source, State, and Purity NR; NR; NR; NR Notes	NR	
Results Details Methods not reported		
Standard Deviation Results not reported		
Results Details not reported		
		x ,
Demain	EVALUATIO	N Commente
Domain Metric	Kaung	Comments
Domain 1: Substance Matria 1: Popresentativeness	High	Date are massived as estimated for the sphilast chamical sphetones
Metric 2: Appropriateness	підії Чіар	Data are measured or estimated for the subject chemical substance.
Metric 2. Appropriateness	Tilgii	Measured data are consistent with the subject chemical substance structural reatures.
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.
Dennein 2. Other		
Domain J: Uller Metric 5: Databases	Uich	The information or date is from a recognized date collection/repository where date are
Metric 5: Databases	rigii	peer-reviewed by experts in the field, are broadly available to the public for review; specific source not reported.
Metric 6: Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determination	High	

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

Study Citation: OECD Harmonized	Dreher, E. L., Beutel, K. K., Myers, J. D., Lübbe, T., Krieger, S., Pottenger, L. H. (2014). Chloroethanes and chloroethylenes. :1-81. Melting Point				
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 C	Guideline	None; Experimental; Not reported			
Solvent, Reactivity, Storage	e, and Stability	Not reported; Not reported; Not reported	; Not reported		
Radiolabel, Source, State, a	and Purity	Not reported; Not reported; Not reported	; Not reported Not	es: Not reported	
Results Details Methods		Not reported			
Standard Deviation Results		Not reported			
Results Details		Not Reported			
D .			EVALUATIO	N	
Domain		Metric	Rating	Comments	
Domain 1: Substance	Matria 1.	Dermandeting	TT: -1-		
	Metric 1:	Ammendiation	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	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.	
Demain 2. Other					
Domain 3: Other	Matria 5.	Databasas	High	Date is from a known date collection managed by amounts in the field	
	Metric 5:	Models	nign N/A	Data is from a known data-conection, prepared by experts in the field.	
	Metric 0.	WIOUEIS	IN/A	kating of this factor is not applicable to this kind of information.	
Overall Qualit	Overall Quality Determination High				

Study Citation: OECD Harmonized	Elsevier, (2019). Reaxys: physical-chemical property data for 1,1-dichloroethane. CAS Registry Number: 75-34-3 Melting Point				
Template: HERO ID:	5926414				
	5720414	Т			
Parameter		Data	LATKACTIO	N	
		Dum			
Melting Point		-97.496.6 °C			
CASRN and Test Material		75-34-3; 1,1-Dichloroethane			
Confidentiality, Type, and C	Juideline	None; Experimental; Not Reported			
Solvent, Reactivity, Storage	, and Stability	NR; NR; NR; NR			
Radiolabel, Source, State, a	nd Purity	NR; NR; NR; NR			
Results Details Methods		Measured conditions were not reported; 6 v point was outside the range.	alues were repor	rted in Reaxys; 5 of these values were reported in the range of -97.4 to -96.6°C; 1 data	
Standard Deviation Results		Not Reported			
Results Details		Not Reported			
		I	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 Reliabili	ty				
	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 secondary database with a references to the peer-reviewed original source.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Qualit	y Determina	ation	High		

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

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ecrystallization 3 times Notes: NA
r

Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	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				
	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:	NIOSH, (2007)	. NIOSH pocket guide to chemical haza	rds.	
OECD Harmonized	Melting Point			
Template:				
HERO ID:	192177			
			EXTRACTIO	N
Parameter		Data		
Melting Point		-143 - F		
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, a	and Purity	NR; NR; NR; NR Notes: NR		
Results Details Methods		NR		
Standard Deviation Results	3	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: Tast Paliabil	it.,			
Domain 2. Test Kendun	Matric 3:	Paliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	Wietrie 5.	(Method Objectivity)	Wiedium	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 2. Other				
Domain 5: Other	Metric 5:	Databases	Madium	Date is from a reasonized near reviewed date collection
	Metric 5.	Models	N/A	Data is nom a recognized, peer-reviewed data confection.
	wieuric o.	Mouels	IN/A	Rating of this factor is not applicable to this kind of information.
Averall Augli	ty Dotormi	nation	High	
	ly Determin	11411011	Ingli	

Study Citation:	NIOSH, (1978).	Occupational health guideline for 1,1-	dichloroethane.	
OECD Harmonized	Melting Point			
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	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR Notes: NR		
Results Details Methods		NR		
Standard Deviation Results		NR		
Results Details		Also reported as -142F.		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	N		TT' 1	
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased	High	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 Oneli	w Dotormir	nation	High	
	y Determin	1411011	Ingii	

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

Study Citation:	NLM, (2018). H	PubChem: Hazardous Substance Data B	ank: 1,1-Dichloro	ethane, 75-34-3.
Template:	Menting Politi			
HERO ID.	5026110			
IIEKO ID.	3920110			
			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		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
	Metric 4:	(Method Objectivity) 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
				son in a poor romon concentration database of 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	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.

			D'11 d 1	705
Study Citation:	O'Neil, M. J. (2)	013). Ethylidene chloride. 75-34-3. [1,1	-Dichloroethane]	. :/05.
OECD Harmonized	Melting Point			
	5026274			
HERO ID:	3920374			
			EXTRACTIO	N
Parameter		Data		
Melting Point		-98 °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		Not Reported		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabili	ity			
Domain 2. Test Kellaulii	Metric 3.	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	Mettle 5.	(Method Objectivity)	Wiedium	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.
				• AA
Overall Qualit	y Determi	nation	High	

PUBLIC RELEASE DRAFT July 2024 Melting Point

Study Citation:	RSC (2019) C	hemSnider: 1.1-Dichloroethane		
OECD Harmonized	Melting Point	ienspider. 1,1-Dienoroeunane.		
Template:	interning i onit			
HERO ID:	5926256			
			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, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Results Details Methods		Not Reported		
Standard Deviation Results		Not Reported		
Results Details		Not Reported		
			FVAL LIATION	
Domain		Metric	Rating	Comments
Domain 1: Substance		incure	Runng	connexts
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3. Other				
Domain 5. Outer	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 Qualit	ty Determin	nation	Medium	

* Related References: SynQuest

Study Citation: OECD Harmonized	Rumble, J. R. (2 Melting Point	018). 1,1-Dichloroethane. :3-16.		
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 C	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	nd Purity	NR; NR; NR; NR		
Results Details Methods		Not Reported		
Standard Deviation Results		Not Reported		
Results Details		Not Reported		
				AT
Domain		Matria	E VALUATIO	Comments
Domain 1: Substance		Metric	Katilig	Comments
Domain 1. Substance	Metric 1.	Representativeness	High	Data are measured or estimated for the subject chemical substance
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties
	Metric 2.	Appropriaciess	Ingn	incasured data are consistent with the subject enclinear s physical/enclinear 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 inclu- sion in a peer-reviewed/recognized database or other secondary source.
Domain 2: Other				
Domain 5: Other	Metric 5:	Databases	High	Data is from a publicly available secondary source with references to a peer-reviewed database.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	y Determin	nation	High	

Study Citation:	U.S. EPA, (2019	9). Chemistry Dashboard Information for	or 1,1-Dichloroeth	ane. 75-34-3	
OECD Harmonized	Melting Point				
Template:	502(120				
HERO ID:	5920159				
			EXTRACTIO	N	
Parameter		Data			
		04.0.07			
Melting Point		-96.9 °C			
CASRN and Test Material	a	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	•	Not Reported			
Results Details		Not Reported			
				AT	
Domain		Matria	E VALUATIO	Commonts	
Domain 1. Substance		Metric	Kating	Comments	
Domain 1: Substance	Matria 1.	Barragantativanaga	Uich	Data are macaying an estimated for the sphilast chemical spheteres	
	Metric 1.	Appropriatoness	High	Data are measured of estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	Filgii	Measured data are consistent with the subject chemical's physical/chemical properties.	
Domain 2: Test Reliabil	ity				
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased	
		(Method Objectivity)		towards a particular product or outcome.	
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu- sion in a peer-reviewed/recognized database or other secondary source.	
Domain 2: Other					
Domain 5: Other	Matria 5.	Databasas	High	Data is former a multiple considered at the source dealer and source to the source of	
	Metric 5:	Databases	High	reviewed source.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Qualit	tv Determi	nation	High		
Sterin Zun					

* Related References: PhysProp

Study Citation: OECD Harmonized	U.S. EPA, (2019 Melting Point). Chemistry Dashboard Information for	or 1,1-Dichloroeth	ane. 75-34-3
Template:	6			
HERO ID:	5926139			
			EXTRACTIO	N
Parameter		Data		
Melting Point		-97.2 °C		
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, a	and Purity	NR; NR; NR; NR		
Results Details Methods		Not Reported		
Standard Deviation Results	5	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			
Bomani 2. Test Kendon	Metric 3	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	Weater 5.	(Method Objectivity)	Wiedrum	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 Determination High				

* Related References: NIOSH

Study Citation:	U.S. EPA, (2019). Chemistry Dashboard Information for 1,1-Dichloroethane. 75-34-3 Melting Point			
Template:	Weiting I ollit			
HERO ID:	5926139			
FXTRACTION				
Parameter		Data	EXTRACTION	
Melting Point		-97 °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		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:	(Mathe d Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Matria 4.	(Method Objectivity) Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was
	Meure 4.	Kenaomty/Analytical Method	Low	used.
Domain 3: Other				
	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-peer reviewed sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determination Mediu				

* Related References: Jean-Claude Bradley Open Melting Point Dataset
| Study Citation: | U.S. EPA, (201 | 9). Chemistry Dashboard Information for | or 1,1-Dichloroethane. | 75-34-3 |
|-------------------------------------|------------------|---|------------------------|--|
| OECD Harmonized | Melting Point | | , | |
| Template: | | | | |
| HERO ID: | 5926139 | | | |
| | | | EXTRACTION | |
| 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 | e, and Stability | NR; NR; NR; NR | | |
| Radiolabel, Source, State, | and Purity | NR; NR; NR; NR | | |
| Results Details Methods | | Not Reported | | |
| Standard Deviation Results | 8 | 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 | lity | | | |
| 20muni 2. rost Kondon | 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 | M | Detabases | N. 4. 1' | |
| | 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 | ty Determi | nation | Medium | |

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

Study Citation:	California Office	California Office of Environmental Health Hazard Assessment (OEHHA) (2011). Appendix B: Chemical-specific summaries of the information used to lerive unit risk and cancer potency values.			
OECD Harmonized	Boiling Point	ind cancer potency varies.			
Template:					
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 C	Guideline	none; not specified; Not reported			
Solvent, Reactivity, Storage	e, and Stability	NK; NR; NR; NR			
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR Notes: NR			
Standard Deviation Results		NR			
Results Details		Not Reported			
D .			EVALUATIO	N	
Domain		Metric	Rating	Comments	
Domain 1: Substance	Matria 1.	Dennestetissen	TT: -1-		
	Metric 1:	Appresentativeness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	nigii	Measured data are consistent with the subject chemical substance structural features.	
Domain 2: Test Reliabili	ity				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.	
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.	
Domain 3: Other					
	Metric 5:	Databases	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 H			High		

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

Study Citation:	California Office of Environmental Health Hazard Assessment (OEHHA) (2003). Public health goals for chemicals in drinking water: 1,1-dichloroethane			3). Public health goals for chemicals in drinking water: 1,1-dichloroethane
OECD Harmonized	Boiling Point			
Template:	5			
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	Juideline	None; calculation; NA		
Solvent, Reactivity, Storage	, and Stability	NA; NA; NA; NA		
Radiolabel, Source, State, a	nd Purity	NA; NA; NA; NA Notes: NA		
Standard Deviation Results		0.2		
Results Details		Reported values are mean and standard	deviation of the values fou	nd 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 Reliabili	ity			
	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:	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 5. 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 Qualit	y 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.

Study Citation: OFCD Harmonized	Canada,, G.o. (2 Boiling Point	2021). Fact sheet: 1,1-dichloroethane.		
Template:	Donnig I onit			
HERO ID:	7309759			
			EXTRACTIO	N
Parameter		Data	Linkieno	
Boiling Point		57 - C		
CASRN and Test Material		75-34-3; 1,1-DICHLOROETHANE		
Confidentiality, Type, and O	Guideline	none; not specified; NR		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	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 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				
Somen 5. 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 Ouali	v 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.

Study Citation:	DOF (2016) T	able 1: Chemicals of Concern and Ass	ociated Chemical I	nformation DACa
OECD Harmonized	Boiling Point	able 1. Chemicals of Concern and Ass	Scialed Chemical I	niormation. FACs.
Template:	e			
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	Guideline	none; not specified; not specified		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR Notes: NR		
Standard Deviation Results	5	not reported		
Results Details		@ 760 mm Hg		
D .			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	N . · 1		TT' 1	
	Metric 1:	Aggregentativeness	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	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 5. Other	Metric 5	Databases	High	The information or data is from a recognized data collection/repository where data are
	wicule J.	Databases	mgn	peer-reviewed by experts in the field, are broadly available to the public for review; specific source not reported.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determi	nation	High	

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

Study Citation: OECD Harmonized	Dreher, E. L., Be Boiling Point	eutel, K. K., Myers, J. D., Lübbe, T., Kri	eger, S., Pottenge	er, L. H. (2014). Chloroethanes and chloroethylenes. :1-81.
Template: HERO ID:	4293766			
	1293700		EVTRACTIO	
Parameter		Data	EATRACIIO	IN
		2		
Boiling Point		57 3 C		
CASRN and Test Material		75-34-3: Not Reported		
Confidentiality, Type, and Confidentiality, and	Guideline	None: Experimental: Not reported		
Solvent, Reactivity, Storage	e, and Stability	Not reported; Not reported; Not reported	; Not reported	
Radiolabel, Source, State, a	and Purity	Not reported; Not reported; Not reported	; Not reported Not	es: 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 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 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 Qualit	ty Determir	nation	High	

Study Citation: OECD Harmonized Template:	Elsevier, (2019). R Boiling Point	Elsevier, (2019). Reaxys: physical-chemical property data for 1,1-dichloroethane. CAS Registry Number: 75-34-3 Boiling Point		
HERO ID:	5926414			
		EXTRACTION		
Parameter		Data		
Boiling Point		56.5 - 59.2 C		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Juideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR		
Radiolabel, Source, State, a	nd Purity	NR; NR; NR		
Standard Deviation Results		Not Reported		
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.		

	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	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 inclu- sion in a peer-reviewed/recognized database or other secondary source.		
Domain 3: Other						
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.		
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		
Overall Quality Determination			High			

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

Study Citation:	National Institute	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:	6				
HERO ID:	10225173				
			EXTRACTIO	N	
Parameter		Data			
Boiling Point		330.5 К			
CASRN and Test Material		75-34-3; Not Reported			
Confidentiality, Type, and C	Guideline	Not Reported; Not Reported; Not Report	ed		
Solvent, Reactivity, Storage	e, and Stability	Not Reported; Not Reported; Not Report	ed; Not Reported		
Radiolabel, Source, State, a	and Purity	Not Reported; Not Reported; Not Report	ed; Not Reported		
Standard Deviation Results		0.5 K			
Results Details		Average of 18 values.			
			EVALUATIO	N	
Domain		Metric	EVALUATIO	Comments	
Domain 1: Substance		Metric	Katilig	Comments	
Domain 1. Substance	Metric 1	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	
	incure 2.	rippiopriateness	mgn		
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 based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.	
Domain 3: Other	M. () 5		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.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Quality Determination					

	NICOLI (2007)		1	
Study Citation: OFCD Harmonized	NIOSH, (2007) Boiling Point	. NIOSH pocket guide to chemical haz	ards.	
Template.	Donnig I onit			
HERO ID:	192177			
				N
Donomotor		Data	EATRACIIO	N
		Data		
Deiline Deint		125 E		
CASEN and Test Material		$153 - \Gamma$ 75 24 2: 1 1 Dichloroothano		
Confidentiality Type and (Juidalina	None: Experimental: None		
Solvent Reactivity Storage	and Stability	NR· NR· NR		
Radiolabel Source State a	and Purity	NR: NR: NR: NR Notes: NR		
Standard Deviation Results	and I arrey	NR		
Results Details		at 1 atmosphere		
		in the second seco		
			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			
Domain 2. Test Kendon	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				
Domain 5. 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 Quality Determination			High	

Study Citation:	NIOSH, (1978).	Occupational health guideline for 1,1-	dichloroethane.	
OECD Harmonized	Boiling Point			
Template:				
HERO ID:	8435203			
			EXTRACTIO	N
Parameter		Data		
Boiling Point		57.3 - C		
CASRN and Test Material	a	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; NR Notes: NR		
Standard Deviation Results		NK		
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	High	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 5. 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 Qualit	ty Determi	nation	High	

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

Study Citation:	NLM, (2018). H	PubChem: Hazardous Substance Data Ba	ank: 1,1-Dichloro	ethane, 75-34-3.
OECD Harmonized	Boiling Point			
Template:				
HERO ID:	5926110			
			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	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
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.
р : <u>о</u> т (р.:	•,			
Domain 2: Test Reliabil				
	Metric 3:	(Mathad Objectivity)	Medium	There is no indication that the methodology for producing the information was biased
	Metric 1:	(Method Objectivity) Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu
	Wieure 4.	Kenability/Analytical Wethod	Wiedium	sion 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	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.

Study Citation: OECD Harmonized	O'Neil, M. J. (2 Boiling Point	013). Ethylidene chloride. 75-34-3. [1,1	-Dichloroethane]	. :705.
Template:	C			
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 C	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Standard Deviation Results	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	ity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu- sion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
	Metric 5:	Databases	High	Data is from a peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determination			High	

Study Citation:	Rumble, J. R. (2	2018). 1,1-Dichloroethane. :3-16.		
Tomplate.	Bolling Folin			
HFRO ID.	5331600			
	5551000			
D			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	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Standard Deviation Results	5	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			
Domain 2. Tost Kellauli	Metric 3.	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	metric 5.	(Method Objectivity)	meanum	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 peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
	hy Dotor	nation	II:ch	
Overall Quality	ly Determi	nation	High	

Study Citation:	Rumble, J. R. (2	2018). Flammability of chemical substan	nces. :16-16 - 16-3	32.	
OECD Harmonized	Boiling Point				
Template:					
HERO ID:	6655446				
			EXTRACTIO	N	
Parameter		Data			
Boiling Point		56.3			
CASRN and Test Material	~	Not Reported; 1,1-Dichloroethane			
Confidentiality, Type, and C	Juideline	none; experimental; Not Reported			
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR			
Radiolabel, Source, State, a	ind 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 Reliabili	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 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 known data-collection, prepared by experts in the field.	
	Metric 6:	Models	N/Ă	Rating of this factor is not applicable to this kind of information.	
Overall Quality Determination			High		

Study Citation:	U.S. EPA, (2019	9). Chemistry Dashboard Information for	or 1,1-Dichloroeth	ane. 75-34-3
OECD Harmonized	Boiling Point	•		
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, Storag	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State,	and Purity	NR; NR; NR; NR		
Standard Deviation Results	8	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			
Domain 2. Test Kendon	Metric 3.	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	metrie 5.	(Method Objectivity)	Wiedrum	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	Hıgh	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 Onali	Overall Quality Determination			
	- <u>_</u>		8	

* Related References: PhysProp

Study Citation:	U.S. EPA, (2019 Boiling Point). Chemistry Dashboard Information fo	r 1,1-Dichloroeth	ane. 75-34-3	
Template:	Donnig I onit				
HERO ID:	5926139				
Donomoton		Data	EXTRACTIO	N	
		Data			
Boiling Point		57.2 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			
Standard Deviation Results		Not Reported			
Results Details		Not Reported			
			EVALUATIO	N	
Domain		Metric	Rating	Comments	
Domain 1: Substance					
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.	
Domain 2: Test Reliabil	ity				
	Metric 3:	Reliability/Unbiased	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 Qualit	Overall Quality Determination				

* Related References: NIOSH

Study Citation:	U.S. EPA, (2019 Deciling Decint	9). Chemistry Dashboard Information for	or 1,1-Dichloroethane.	75-34-3
Tompleter	Boining Point			
	502(120			
HERO ID:	3920139			
			EXTRACTION	
Parameter		Data		
Boiling Point		57 C		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Buideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage	, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	nd 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 Reliabili	itv			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 2: Other				
Domain 5: Other	Matria 5.	Databasas	Madium	
	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

Study Citation:	U.S. EPA, (2019	9). Chemistry Dashboard Information for	or 1,1-Dichloroethane.	75-34-3
Tompleto:	Boining Point			
	5026130			
HERO ID:	3920139			
			EXTRACTION	
Parameter		Data		
Boiling Point		57 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		
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 Reliabil				
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Matria 4.	(Method Objectivity) Reliability/A polytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was
	Metric 4:	Renability/Analytical Method	Low	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.
Orvenell Ora-184	Determert			

* Related References: Matrix Scientific

Study Citation:	U.S. EPA, (2019	9). Chemistry Dashboard Information for	or 1,1-Dichloroethane.	75-34-3
Tompleto:	Boining Point			
	5026130			
HERO ID:	3920139			
			EXTRACTION	
Parameter		Data		
Boiling Point		57 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		
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 Reliabil				
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Matria 4.	(Method Objectivity) Reliability/A polytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was
	Metric 4:	Renability/Analytical Method	Low	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.
Orvenell Ora-184	Determert			

* Related References: Matrix Scientific

Study Citation:	Varushchenko, R. ethanes and propa	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						
		EXTRACTION					
Parameter		Data					
Boiling Point		330.37 К					
CASRN and Test Material		75-34-3; 1,1-Dichloroethane					
Confidentiality, Type, and C	Juideline	None; Experimental; Not Reported					
Solvent, Reactivity, Storage, and Stability NR; NR; NR		NR; NR; NR					
Radiolabel, Source, State, a	nd 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	Ň
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	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 Reliabi	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific ques- tion, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determination			High	

1,1-Dichloroethane

Study Citation: OECD Harmonized	Canada,, G.o. (2 Density	2021). Fact sheet: 1,1-dichloroethane.		
HERO ID:	7309759			
			EXTRACTIO	N
Parameter		Data		
Density CASRN and Test Material Confidentiality, Type, and G Solvent, Reactivity, Storage Radiolabel, Source, State, a Density Type System Temperature	Guideline e, and Stability and Purity	1.17 - 75-34-3; 1,1-DICHLOROETHANE None; not specified; NR NR; NR; NR; NR NR; NR; NR Notes: NR relative density NR NR		
Results Details	5	NR density relative to water (water=1)		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	Metric 1: Metric 2:	Representativeness Appropriateness	High N/A	Data are measured or estimated for the subject chemical substance. Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	itv			
2	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 Quali	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

Study Citation: OECD Harmonized	Canada,, G.o. (2 Density	021). Fact sheet: 1,1-dichloroethane.		
HERO ID:	7309759			
			EXTRACTIO	N
Parameter		Data		
Density CASRN and Test Material Confidentiality, Type, and G Solvent, Reactivity, Storage Radiolabel, Source, State, a Density Type System Temperature Standard Deviation Results Results Details	Guideline e, and Stability Ind Purity	3.4 - 75-34-3; 1,1-DICHLOROETHANE None; not specified; NR NR; NR; NR; NR NR; NR; NR; NR Notes: NR vapor density NR NR NR NR density relative to air (air=1.29)		
Domain		Metric	EVALUATIO	N Comments
Domain 1: Substance		Wette	Katilig	connicits
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	itv			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	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				
Domain 5. 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 Qualit	y 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

Study Citation: OECD Harmonized	DOE, (2016). Ta Density	DOE, (2016). Table 1: Chemicals of Concern and Associated Chemical Information. PACs. Density				
Template:						
HERO ID:	3981013					
	EXTRACTION					
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, Storage	e, and Stability	NR; NR; NR; NR				
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR Notes: NR				
Density Type		specific gravity (density of a substance di	ivided by the densi	ity of water)		
System		not specified				
Temperature		20°C				
Standard Deviation Results	5	not reported				
Results Details		not reported				
			EVALUATIO	Ň		
Domain		Metric	Rating	Comments		
Domain 1: Substance						
	Metric 1:	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	Medium	There is no indication that the methodology for producing the information was biased		
	36.1.4	(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 peet-teviewed/tecoginzed database of other secondary source.		
Domain 3. Other						
Domain 5. Other	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are		
			<u>B</u>	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 Auali	tv Determi	nation	Hiah			
Over all Quality Determination Ingi						

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

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. Density						
HERO ID:	4293766	4293766					
			EXTRACTIO	N			
Parameter		Data					
Density		1.176 g/cm3					
CASRN and Test Material		75-34-3; Not Reported					
Confidentiality, Type, and C	Guideline	None; Experimental; Not reported					
Solvent, Reactivity, Storage	e, and Stability	Not reported; Not reported; Not reported	; Not reported				
Radiolabel, Source, State, a	and Purity	Not reported; Not reported; Not reported	; Not reported Not	es: Not reported			
Density Type		Density					
System		Not reported					
Temperature		20°C	20°C				
Standard Deviation Results	5	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	Medium	There is no indication that the methodology for producing the information was biased			
		(Method Objectivity)	1.10010111	towards a particular product or outcome.			
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.			
Domain 3: Other							
	Metric 5:	Databases	High	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 Qualit	Overall Quality Determination High						

Study Citation:	NIOSH, (2007)	. NIOSH pocket guide to chemical haza	ards.	
Tompletor	Density			
	102177			
HERO ID:	192177			
			EXTRACTION	
Parameter		Data		
Dansity		1.19 Not reported		
CASDN and Test Material		1.18 - Not reported		
CASKN and Test Material	C	Nonex Experimental ND		
Confidentiality, Type, and C		None; Experimental; NR		
Dediatabal Service Storage	e, and Stability	NR; NR; NR; NR		
Radioladel, Source, State, a	and Purity	INK; INK; INK; INK INOLES: INK		
Density Type		Specific gravity		
System		Not reported		
Standard Deviation Desults		Not Reported		
Basulta Detaila		INK Not Papartad		
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: Tast Paliabil	:4.,			
	Metric 2.	Reliability/Unbiased	Madium	There is no indication that the methodology for producing the information was biased
	Wietric 5.	(Method Objectivity)	Wedium	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
	Medie 1.	Ternashiej/Timarj tear Tristisa	Weddialli	inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 2: Other				
Domain 5: Other	Metric 5.	Databases	Medium	The data are from a course that is known but is missing alamants required for Uigh
	Metric 5.	Databases	Medium	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	

Study Citation: OECD Harmonized	NIOSH, (1978). Density	Occupational health guideline for 1,1-di	chloroethane.			
HERO ID:	8435203					
	EXTRACTION					
Parameter		Data				
Density		1.2 -				
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; NR Notes: NR				
Density Type		specific gravity				
System		NR				
Temperature		NR				
Standard Deviation Results		NR				
Results Details		specific gravity relative to water (water =	1)			
			EVALUATIO	N		
Domain		Metric	Rating	Comments		
Domain 1: Substance						
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.		
Domain 2: Test Reliabili	ity					
	Metric 3:	(Method Objectivity)	Hıgh	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	M. () 5					
	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: Several references listed in the reference but not attributed to specific data.

Study Citation: OECD Harmonized	NIOSH, (1978). Density	Occupational health guideline for 1,1-di	ichloroethane.	
HERO ID:	8435203			
			EXTRACTIO	N
Parameter		Data		
Density CASRN and Test Material Confidentiality, Type, and G Solvent, Reactivity, Storage Radiolabel, Source, State, a Density Type System Temperature Standard Deviation Results Result Details	Guideline e, and Stability and Purity	3.4 - 75-34-3; 1,1-DICHLOROETHANE none; not specified; NR NR; NR; NR; NR NR; NR; NR Notes: NR vapor density NR NR NR NR	OFTHANE	
Results Details		air =1, at boining point of 1,1-DICHLOR	OETHANE	
			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 (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 Determin	nation	High	

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

Study Citation: OECD Harmonized	Elsevier, (2019) Density	. Reaxys: physical-chemical property dat	ta for 1,1-dichlor	roethane. CAS Registry Number: 75-34-3			
HERO ID:	5926414						
			EXTRACTIO	N			
Parameter		Data					
D 1		1 1 (70 1 1005 / 2					
Density		1.16/9 - 1.1805 g/cm3					
CASRN and Test Material	~ • • • •	/5-34-3; 1,1-Dichloroethane					
Confidentiality, Type, and C	Juideline	None; Experimental; Not Reported					
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR					
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR					
Temperature		20-25°C					
Standard Deviation Results							
Results Details		(20-25°C; 26 values were reported in R range or measured at unreported or non-s	standard temperatu	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	ity						
Bomain 2, Test Kellabil	Metric 3	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased			
	metric 5.	(Method Objectivity)	wicaidill	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							

Overall Quality Determination

Metric 5:

Metric 6:

High

High

N/A

source.

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.

Databases

Models

	D 1		inc. 1,1 Diemoio	culalic, 75-54-5.
OECD Harmonized	Density			
Template:	502(110			
HERO ID:	5926110			
			EXTRACTIO	N
Parameter		Data		
Density		1.1680 - 1.175 g/cm3		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Buideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage	, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	nd Purity	NR; NR; NR; NR		
l'emperature		1.1680 @ 25 C; 1.175 @ 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 Reliabili	tv			
	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				
Domain 5: Other	Matria 5.	Databasas	High	Data is from a multiply qualible man environed database that maniful a sufficiency to a
	wieuric 5:	Databases	High	pata is from a publicity 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: 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:	O'Neil, M. J. (2	013). Ethylidene chloride. 75-34-3. [1,	1-Dichloroethane]	. :705.
OECD Harmonized	Density			
Template:				
HERO ID:	5926374			
			EXTRACTIO	N
Parameter		Data		
Density		1.1757 g/cm3		
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	nd Purity	NR; NR; NR; NR		
Temperature	-	20°C		
Standard Deviation Results		Not Reported		
Results Details		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 Reliabili	ity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu- sion in a peer-reviewed/recognized database or other secondary source.
Domain 5. Outer	Metric 5:	Databases	High	Date is from a recognized near reviewed date collection
	Metric 6:	Models	N/A	Data is from a recognized, peer-reviewed data concention.
	mente 0.	WIGUEIS	IN/A	Kating of uns factor is not applicable to uns kind of information.
Overall Qualit	y Determi	nation	High	

Study Citation:	O'Neil, M. J. (2	013). Ethylidene chloride. 75-34-3. [1,	I-Dichloroethane]	. :/05.	
OECD Harmonized	Density				
Template:	500(274				
HERO ID:	5926374				
			EXTRACTIO	N	
Parameter		Data			
Density		1.1680 g/cm3			
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			
Temperature		25°C			
Standard Deviation Results	1	Not Reported			
Results Details		at 25°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 Reliabil	ity				
2 onium 2. Test Relidon	Metric 3.	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased	
	Medie 5.	(Method Objectivity)	Wiedrum	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					
2 childin 2. Outer	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	t <mark>y Determi</mark>	nation	High		

Study Citation:	RSC, (2019). C	hemSpider: 1,1-Dichloroethane.		
OECD Harmonized	Density			
Template:	502(25)			
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, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Temperature		20°C		
Standard Deviation Results	6	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	Medium	There is no indication that the methodology for producing the information was biased
	34.1.4	(Method Objectivity)	Ţ	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.
0 110 11				
Overall Qualit	ty Determi	nation	Medium	

* Related References: SynQuest

Study Citation: OECD Harmonized	RSC, (2019). Ch Density	emSpider: 1,1-Dichloroethane.		
HERO ID:	5926256			
			EXTRACTION	
Parameter		Data		
Donsity		$1.19 a/am^2$		
CASEN 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, a	and Purity	NR: NR: NR: NR		
Temperature		Not Reported		
Standard Deviation Results		Not Reported		
Results Details		Not Reported		
		-		
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	ity			
	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:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Domain 3: Other				
Domain 5. Other	Metric 5:	Databases	Medium	Data is from a publicly available secondary source with references to non-near reviewed
	wiente <i>J</i> .	Data04355	wearulli	sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determin	nation	Medium	

* Related References: Matrix Scientific

Study Citation:	Rumble I R (2018) 1 1-Dichloroethane :3-16			
OECD Harmonized	Density	2010). I,I Diemoroeulane			
Template:					
HERO ID:	5331600				
			EXTRACTIO	N	
Parameter		Data		-	
Density		1.1757 g/cm3			
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			
Temperature		20°C			
Standard Deviation Results	5	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 Paliabil	ity				
	Metric 3	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased	
	Wiettie 5.	(Method Objectivity)	Wiedium	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 5. Other	Metric 5:	Databases	High	Data is from a recognized near reviewed data collection	
	Metric 6:	Models	N/A	Data is from a recognized, peer-reviewed data concention.	
	within 0.	10100015	IN/A	Rating of uns factor is not applicable to uns kind of information.	
Overall Qualit	ty Determi	nation	High		
	v		8		

Study Citation: OECD Harmonized	NLM, (2018). PubChem: Hazardous Substance Data Bank: 1,1-Dichloroethane, 75-34-3. Density						
Template:	Denoty						
HERO ID:	5926110						
EXTRACTION							
Parameter		Data					
Density		3 11					
CASEN 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					
System		Not reported					
Temperature		Not Reported					
Standard Deviation Results		Not Reported					
Results Details		air = 1					
EVALUATION							
Domain		Metric	Rating	Comments			
Domain 1: Substance							
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.			
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical's physical/chemical properties.			
Domain 2: Test Reliability							
	Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques- 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.			
Domain 3: Other							
	Metric 5:	Databases	High	Data is from a publicly available, peer-reviewed database that provides references to original sources.			
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.			
Overall Quality Determination			High				

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

Study Citation:	NLM, (2020). PubChem database: compound summary: 1,1-dichloroethane.						
OECD Harmonized	Density						
Template:							
HERO ID:	6629204						
EXTRACTION							
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		Not reported					
Results Details		Relative to air					
Domain		Matria	E VALUATIO	Commonte			
Domain 1: Substance		Wietric	Katilig	Comments			
Domain 1. Substance	Matric 1	Depresentativeness	High	Data are measured or actimated for the subject chemical substance			
	Matria 2:	Appropriatoness	High	Measured data are consistent with the subject chemical substance.			
	Methe 2.	Appropriateness	Ingh	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- 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-			
	Wette 1.	Rendonity/Analytical Motiod	Wedduin	sion 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							
Over an Quanty Determination			Ingli				

* 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.
| Study Citation:
OECD Harmonized | NLM, (2020). P
Density | ubChem database: compound summary | 7: 1,1-dichloroetha | ane. |
|------------------------------------|---------------------------|---|---------------------|--|
| HERO ID: | 6629204 | | | |
| | | | EXTRACTIO | N |
| Parameter | | Data | | |
| | | | | |
| Density | | 3.4 | | |
| CASRN and Test Material | a | 75-34-3; 1,1-DCA | | |
| Confidentiality, Type, and C | Guideline | None; Experimental; Not specified | | |
| Solvent, Reactivity, Storage | e, and Stability | NR; NR; NR; NR | | |
| Radiolabel, Source, State, a | and Purity | NR; NR; NR; NR | | |
| System | | Not reported | | |
| Stondard Deviation Desults | | Not reported | | |
| Standard Deviation Results | 5 | Not reported
Relative vanor density (air $= 1$) | | |
| Results Details | | Relative vapor density $(an = 1)$ | | |
| | | | 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 Reliabil | itv | | | |
| | Metric 3: | Reliability/Unbiased
(Method Objectivity) | High | The methodology for producing the information is designed to answer a specific ques-
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. |
| Domain 2. Other | | | | |
| Domain 5: 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: ILO International Chemical Safety Cards (ICSC)

Study Citation: OECD Harmonized	NLM, (2020). P Density	ubChem database: compound summary	r: 1,1-dichloroetha	ane.
HERO ID:	6629204			
			EXTRACTIO	N
Parameter		Data		
Density		3.44		
CASRN and Test Material		75-34-3; 1,1-DCA		
Confidentiality, Type, and Confidentiality, and	Guideline	None; Experimental; Not specified		
Solvent, Reactivity, Storage	e, and Stability	NR; 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		Not Reported		
			EVALUATIO	
Domain		Metric	Rating	Comments
Domain 1: Substance		metric	ituing	Connicito
Domain 1. Substance	Metric 1:	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:	(Method Objectivity)	High	The methodology for producing the information is designed to answer a specific ques- 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.
Domain 3: Other				
Domain 5. 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 Qualit	ty Determin	nation	High	

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

Study Citation:	California Office	California Office of Environmental Health Hazard Assessment (OEHHA) (2011). Appendix B: Chemical-specific summaries of the information used to			
OECD Harmonized	Vapor Pressure	nd cancer potency values.			
Template:					
HERO ID:	5155632				
			EXTRACTIO	N	
Parameter		Data			
Van an Decasar		220 mm H-			
CASPN and Tast Material		230 mm Hg 75 24 2: 1 1 DICHLODOETHANE			
CASKIN and Test Material	Juidalina	75-54-5; 1,1-DICHLOROETHANE			
Solvent Reactivity Storage	and Stability	ND, ND, ND, ND			
Padialabel Source State	and Durity	ND ND ND ND ND Notes ND			
Temperature	ind I unity	25 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 Reliabil	its.				
Bomani 2, Test Kendon	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased	
	11100110 01	(Method Objectivity)	1110010111	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.	
Demein 2. Other					
Domain 3: Other	Metric 5	Databases	Medium	The data are from a source that is known but is missing elements required for High	
	Wieure 5.	Databases	Wiedium	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	y Determin	nation	High		

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

Study Citation:	California Office o	California Office of Environmental Health Hazard Assessment (OEHHA) (2003). Public health goals for chemicals in drinking water: 1,1-dichloroethane		
OECD Harmonized	in drinking water. Vapor Pressure			
Template:				
HERO ID:	5155634			
			EXTRACTION	
Parameter		Data		
Vapor Pressure		0.3 atm		
CASRN and Test Material		/5-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	and Stability	None; calculation; NA		
Solvent, Reactivity, Storage	, and Stability	NA; NA; NA; NA		
Radiolabel, Source, State, a	na Purity	NA; NA; NA; NA Notes: NA		
System		INA NA		
System Standard Deviation Results		NA 0.0054		
Pasulte Dataile		Reported values are mean and standard dev	vistion of the values for	ind in a handbook
Results Details		Reported values are mean and standard dev	viation of the values for	
			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 Reliabili	fv			
2 sinuin 2. Tost Rendom	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.
Demain 2. Other				
Domain 3: Other	Matria 5.	Databasas	Madium	The date are from a source that is known but is missing elements required for Tick
	Metric 5:	Databases	Medium	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	y Determina	ition	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.

Study Citation: OECD Harmonized	Canada,, G.o. (20 Vapor Pressure	021). Fact sheet: 1,1-dichloroethane.		
HERO ID:	7309759			
			EXTRACTIO	N
Parameter		Data		
V D		220 11		
CASEN and Test Material		220 - mm Hg		
CASKIN and Test Material	S	75-54-5; 1,1-DICHLOROETHANE		
Solvent Beastivity Storeg	Juluellile	ND, ND, ND, ND		
Radiolabel Source State a	and Purity	NR: NR: NR: NR Notes: very volatile		
Temperature	and I drity	room temperature		
System		NR		
Standard Deviation Results		NR		
Results Details		Not Reported		
		L L		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
	• .			
Domain 2: Test Reliabil	ity		TT' 1	
	Metric 3:	(Mathad Objectivity)	High	I here is no indication that the methodology for producing the information was biased
	Metric 4	(Method Objectivity) Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's
	Medice 1.	Rendomly// marytear Wethod	Wiedium	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 Determin	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.

Study Citation:	DOE, (2016). Ta	ble 1: Chemicals of Concern and Asse	ociated Chemical I	nformation. PACs.
OECD Harmonized	Vapor Pressure			
Template:	2001012			
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 C	Guideline	none; not specified; not specified		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR Notes: NR		
Temperature				
System		not reported		
Standard Deviation Results		not reported		
Results Details		not reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance		Metre	Runng	Connients
Domain 1. Substance	Metric 1:	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.
				J
Domain 2: Test Reliabil	ity			
	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
	Meure 4.	Kenability// Maryticar Method	Weddulli	inclusion in a peer-reviewed/recognized database or other secondary source.
Demoir 2. Other				
Domain 5: Other	Matria 5.	Databasas	Uich	The information or date is from a recognized date collection transitions where date are
	Metric 5:	Databases	nigii	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 Determin	nation	High	

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

Study Citation: OECD Harmonized	Dreher, E. L., Be Vapor Pressure	Dreher, E. L., Beutel, K. K., Myers, J. D., Lübbe, T., Krieger, S., Pottenger, L. H. (2014). Chloroethanes and chloroethylenes. :1-81. Vapor Pressure			
HERO ID:	4293766				
			EXTRACTIO	N	
Parameter		Data			
Vapor Pressure CASRN and Test Material Confidentiality, Type, and C Solvent, Reactivity, Storage Radiolabel, Source, State, a Temperature System Standard Deviation Results Results Details	Guideline e, and Stability ınd Purity	24.27 kPa 75-34-3; Not Reported None; Experimental; Not reported Not reported; Not Reported; Not Report Not Reported; Not Reported; Not Report 20°C Not reported Not Reported 9.34 kPa at 0°C; 15.37 kPa at 10°C; 36.5	ed; Not Reported ted; Not Reported 15 kPa at 30°C		
			EVALUATIO	N	
Domain		Metric	Rating	Comments	
Domain 1: Substance	34.1.1	D			
	Metric 1: 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 (e.g., presence of certain functional groups) or other 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	The analytical method is non-standard but is expected to be appropriate OR the analyti- cal method is unknown but 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 Qualit	ty Determin	nation	High		

Study Citation: OECD Harmonized	Elsevier, (2019). F Vapor Pressure	Elsevier, (2019). Reaxys: physical-chemical property data for 1,1-dichloroethane. CAS Registry Number: 75-34-3 Vapor Pressure				
HERO ID:	5926414					
			EXTRACTIO	N		
Parameter		Data				
Vapor Pressure		227.268 mm Hg				
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	nd 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	s reported at 227.	268 torr at standard temperature; 7 data points were outside the range, measured at		
		non-standard of 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 Reliabili	ity	~				
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased		
	Madula A.	(Method Objectivity)	Madimu	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 secondary database with a references to the peer-reviewed original source.		
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		

Overall Quality Determination

High

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

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:					
HERO ID:	1937605				
	EXTRACTION				
Parameter	Data				
Vapor Pressure	8.3E4 Pa				
CASRN and Test Material	75-34-3; 1,1-Dichloroethane	75-34-3; 1,1-Dichloroethane			
Confidentiality, Type, and C	ideline None; Experimental; Not Reported	None; Experimental; Not Reported			
Solvent, Reactivity, Storage	and Stability NR; under nitrogen and protected from sunlight; NR				
Radiolabel, Source, State, a	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: ± 0.2 K , Pressure: ± 10 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	٨
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 Reliabil	lity			
	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 Quality Determination			High	

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 Pi	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	Vapor Pressure						
Template:							
HERO ID:	9087635						
		EXTRACTION					
Parameter		Data					
Vapor Pressure		0.644 - 16.502 cm Hg					
CASRN and Test Material	1	75-34-3; 1,1-Dichloroethane					
Confidentiality, Type, and	Guideline	None; Experimental; None; measured using a mercury manometer					
Solvent, Reactivity, Storag	ge, 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 29		234.38 to 290.76 K					
System mercury manometer with 1.6 cm inside diameter		mercury manometer with 1.6 cm inside diameter					
Standard Deviation Results N		NR					
Results Details vapor pressure = 165.02 mm Hg at 290.76K		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	lity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific ques- tion, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.
Domain 3: Other				
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determination			High	

Study Citation:	Li, M., J.C., Pit	i, 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-				
OECD Harmonized	Vapor Pressure	ressure and Entropy of the fideal Gas. The		na Rotaton. Journal of the American Chemical Society 76(0).1077-1060.		
HERO ID:	9087635					
EXTRACTION						
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				bstance 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				% by fractional distillation and recrystallization 3 times Notes: NA		
Temperature Not Reported						
System		Not Reported				
Standard Deviation Results	3	NR				
Results Details		heat of vaporization 7409 \pm 7 cal/mole a	t 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 Reliabil	ity					
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific ques- tion, and the methodology's objective is clear.		
Metric 4: Reliab		Reliability/Analytical Method	High	Data are obtained by accepted standard analytical methods, including, but not limited to OECD guidelines for physical-chemical properties or other developed standard.		
Domain 3: Other						
	Metric 5:	Databases	N/A	Rating of this factor is not applicable to this kind of information.		
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		
Overall Ouali	tv Determi	nation	High			

Study Citation:	National Institute	Vational 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 C	Juideline	Not Reported; Not Reported; Not Reported				
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR				
Radiolabel, Source, State, a	ind Purity	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 Reliabili						
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased		
	Matria 4	(Method Objectivity) Reliability/A palytical Mathod	Madium	The analytical method is unknown but is likely to be appropriate based on the date's		
	Meure 4.	Renability/Analytical Method	Medium	inclusion in a peer-reviewed/recognized database or other secondary source.		
				neusion in a peer reviewees/eeeginzed database of other secondary source		
Domain 3: Other						
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are		
			8	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.		
Avanall Avali						
	y Determin		nign			

* 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

Study Citation:	National Institute	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:	10005150					
HERO ID:	10225173					
]	EXTRACTION			
Parameter		Data				
Vapor Pressure		Not Reported				
CASRN and Test Material	~	75-34-3; 1,1-Dichloroethane				
Confidentiality, Type, and C	Guideline	Not Reported; Not Reported; Not Reported				
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR				
Radiolabel, Source, State, a	ind Purity	NR; NR; NR; NR				
Temperature		293 K				
System		Not Reported				
Standard Deviation Results		Not Reported				
Results Details		Enthalpy of vaporization: 31 ± 29 kJ/mol				
			FVAL HATION			
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	Ily Matria 2:	Polishility/Upbiegod	Madium	There is no indication that the methodology for producing the information was biased		
	Metric 5.	(Method Objectivity)	Wiedrum	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		
		Tenaonity, marytear method		inclusion in a peer-reviewed/recognized database or other secondary source		
Domain 3: Other						
Domain 5. Outer	Metric 5	Databases	Medium	The data are from a source that is known but is missing elements required for High		
	metric 5.	Dumbusts	wicdium	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.		
Avanall Avali	w Dotomoi-	ation	Madium			
Overall Qualit	y Determin		wiedium			

* 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

Study Citation:	National Institute	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:	10225172						
HERO ID:	10225173						
	EXTRACTION						
Parameter		Data					
Vapor Pressure		Not Reported					
CASRN and Test Material		75-34-3; 1,1-Dichloroethane					
Confidentiality, Type, and Confidentiality, and	Guideline	Not Reported; Not Reported; Not Reported	ed				
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR					
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR					
Temperature		2/5 K, based on data from 234 290. K.					
System		Not Reported					
Standard Deviation Results	8	Not Reported					
Results Details		Enthalpy of vaporization: 31.9 kJ/mol					
Domain		Matria	EVALUATIO	N Commonto			
Domain 1: Substance		Metric	Katilig	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	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	Matria 5	Detabases	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.			
Overall Qualit	ty Determin	ation	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

Study Citation:	National Institute	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:	1					
HERO ID:	10225173					
]	EXTRACTIO	N		
Parameter		Data				
Vapor Pressure		Not Reported				
CASRN and Test Material		75-34-3; 1,1-Dichloroethane				
Confidentiality, Type, and C	Guideline	Not Reported; Not Reported; Not Reported	1			
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR				
Radiolabel, Source, State, a	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				
			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	Medium	There is no indication that the methodology for producing the information was biased		
	Matria 4.	(Method Objectivity) Reliability/Analytical Mathad	Madium	towards a particular product or outcome.		
	Metric 4:	Kenability/Anarytical Method	Medium	inclusion in a peer-reviewed/recognized database or other secondary source		
Demein 2. Other						
Domain 3: Other	Matria 5.	Databasas	Hak			
	Metric 5:	Databases	High	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 Dotormin	ation	High			
	y Determin	auvii	Ingu			

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

Study Citation:	National Institute	of Standards and Technology (NIST),	(2022). NIST Che	emistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database
OECD Harmonized	No. 69. Vapor Pressure			
Template:				
HERO ID:	10225173			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		Not Reported		
CASRN and Test Material	G . 1 J.	/5-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Guideline	Not Reported; Not Reported; Not Report	rted	
Padialabal Source State	e, and Stability	NR, NR, NR, NR		
Temperature	and Furity	176 18 K		
System		Not Reported		
Standard Deviation Results		Not Reported		
Results Details	,	Enthalpy of fusion: 7.870 kJ/mol		
		F)		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased	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	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 Determin	ation	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.

Study Citation:	National Institute	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					
			EXTRACTIO	N		
Parameter		Data				
Vapor Pressure		Not Reported				
CASRN and Test Material	~	75-34-3; 1,1-Dichloroethane	_			
Confidentiality, Type, and C	Guideline	Not Reported; Not Reported; Not Repo	orted			
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR				
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR				
System		1/0.2 K Not Reported				
System Standard Daviation Posulta		Not Reported				
Results Details	,	Enthalpy of fusion: 7.87 kI/mol				
Results Details		Enthalpy of fusion. 7.67 Ki/mor				
			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	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						
Soman 5. Out	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 Determin	ation	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

Study Citation:	National Institute	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:	10005150					
HERO ID:	10225173					
			EXTRACTION			
Parameter		Data				
Vapor Pressure		Not Reported				
CASRN and Test Material		75-34-3; 1,1-Dichloroethane				
Confidentiality, Type, and C	Guideline	Not Reported; Not Reported; Not Reporte	d			
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR				
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR				
Temperature		20 C				
System		NR				
Standard Deviation Results		Not Reported				
Results Details		Enthalpy of vaporization at standard condi	itions: 30.77 kJ/mol			
			EVALUATION			
Domain Domain 1: Substance		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	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	Matria 5.	Detaharan	Malin			
	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: Majer, V.; Svoboda, V., Enthalpies of Vaporization of Organic Compounds: A Critical Review and Data Compilation, Blackwell Scientific Publications, Oxford, 1985, 300.

Study Citation:	National Institute	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:	10005150					
HERO ID:	10225173					
			EXTRACTIO	N		
Parameter		Data				
Vapor Pressure		Not Reported				
CASRN and Test Material		75-34-3; 1,1-Dichloroethane				
Confidentiality, Type, and C	Guideline	Not Reported; Not Reported; Not Report	ted			
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR				
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR				
Temperature	rature 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 con	ditions: 30.83 ± 0.0	18 kJ/mol		
Demein		Matria	EVALUATIO	N		
Domain 1: Substance		менис	Kating	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	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	M (' 5		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		
	Metric 6:	Models	N/A	use. Rating of this factor is not applicable to this kind of information		
	metric 0.	Models	11/74	Rating of this factor is not applicable to this kind of information.		
Overall Qualit	ty Determin	ation	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

Study Citation:	National Institute	of Standards and Technology (NIST), (2022). NIST Che	emistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database
OECD Harmonized	No. 69. Vapor Pressure			
Template:				
HERO ID:	10225173			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		Not Reported		
Confidentiality Type and (Juidalina	Not Peported: Not Peported: Not Peport	ad	
Solvent Reactivity Storage	and Stability	NR· NR· NR· NR		
Radiolabel, Source, State, a	and Purity	NR: NR: NR: NR		
Temperature		20 C		
System		Not Reported		
Standard Deviation Results		Not Reported		
Results Details		Enthalpy of vaporization at standard con-	ditions: 30.62±0.1	4 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 Reliabili	ity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	Matria A.	(Method Objectivity)	Madian	towards a particular product or outcome.
	Metric 4:	Renability/Analytical Method	Medium	inclusion in a peer-reviewed/recognized database or other secondary source
Domain 3: Other	Metric 5:	Databases	High	The information or date is from a recognized date collection/repository where date are
	Metric 5.	Databases	nigii	peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	y Determin	ation	High	

* 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

Study Citation:	National Institute	of Standards and Technology (NIST), ((2022). NIST Che	emistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database
OECD Harmonized	No. 69. Vapor Pressure			
Template:	10005150			
HERO ID:	10225173			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		Not Reported		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Guideline	Not Reported; Not Reported; Not Repor	ted	
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Tama anotura	and Purity	NR; NR; NR; NR		
System		20 C Not Penorted		
System Standard Deviation Results		Not Reported		
Results Details		Enthalpy of vaporization at standard con	ditions: 30.6+0.1.1	k I/mol
Results Details		Entituipy of superization at standard con		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	itv			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source
Domain 3: Other				
Domain 5. Otter	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determin	ation	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

Study Citation:	National Institute	e of Standards and Technology (NIST), (2022). NIST Che	emistry WebBook. Ethane, 1,1-dichloro- (75-34-3). Standard Reference Database
OECD Harmonized	No. 69. Vapor Pressure			
Template:				
HERO ID:	10225173			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		Not Reported		
CASRN and Test Material	~	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C		Not Reported; Not Reported; Not Report	ted	
Solvent, Reactivity, Storage	e, and Stability	NK; NK; NK; NR		
Tammanatura	and Purity	NK; NK; NK; NK		
System		293 K Not Peported		
System Standard Deviation Results		Not Reported		
Results Details	9	Enthalpy of vaporization: 31 000 kI/mol		
Results Details				
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	itv			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source
Domain 3: Other				
Domain 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 and use.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determin	ation	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.

Study Citation:	National Institute	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			
CASKN and Test Material	C	/5-34-3; 1,1-Dichloroethane	1		
Solvent Resetivity Storeg	Juideline	NOT Reported; NOT Reported; NOT Reported	1		
Radiolabel Source State	and Purity	NR · NR · NR · NR			
Temperature	ind I drity	330.4 K			
System	Not Reported				
Standard Deviation Results	4	Not Reported			
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 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 based on the data's inclusion in a peer-reviewed/recognized database or other secondary source	
Domain 2: Other					
Domain 5. 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	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
			. .		
Overall Qualit	ty Determin	ation	Medium		

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

Study Citation:	National Institute	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				
			EXTRACTIO	N	
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 Reporte	ed		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR			
Radiolabel, Source, State, a	and Purity	NK; NK; NK; NK			
Temperature		336 K, based on data from 326 345. K			
System	_	Not Reported			
Pagulte Details	5	For the point of t			
Results Details		Enthalpy of vaporization. 55.5 Ki/mor			
			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 2: Other					
Domain 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 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 Determin	ation	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

Study Citation:	National Institute	Vational 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				
			EXTRACTIO	N	
Parameter		Data			
Vapor Pressure		Not Reported			
CASRN and Test Material	~	75-34-3; 1,1-Dichloroethane			
Confidentiality, Type, and C	Guideline	Not Reported; Not Reported; Not Reporte	ed		
Solvent, Reactivity, Storage	e, and Stability	NK; NK; NK; NK			
Tammanatura	and Purity	NK; NK; NK; NK			
System		Not Reported	•		
System 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 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					
Domain 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 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 Determin	ation	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

Study Citation: OECD Harmonized	NCBI, (2020). F Vapor Pressure	PubChem Compound Summary for CID	6365: 1,1-Dichlo	roethane.	
Template: HERO ID:	10180525				
			EXTRACTIO	N	
Parameter		Data			
Vapor Pressure		Not Reported			
CASRN and Test Material		75-34-3; 1,1-Dichloroethane			
Confidentiality, Type, and C	Guideline	None; not specified; NA			
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR			
Radiolabel, Source, State, a	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	cal/g, 3.06x10^5 J/	(g)	
			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 Reliabil	ity				
Domain 2. Test Kellauli	Metric 3.	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased	
	Wietrie 5.	(Method Objectivity)	Wiedrum	towards a particular product or outcome.	
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.	
Domain 3: Other	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Quality Determination Hig					

* Related References: Citing CAMEO chemicals, 2018.

Study Citation: OECD Harmonized	NIOSH, (2007). Vapor Pressure	NIOSH pocket guide to chemical haz	ards.	
Template: HERO ID:	192177			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		182 - mm Hg		
CASRN and Test Material	S.: 4.1	75-34-3; 1,1-Dichloroethane		
Solvent Reactivity Storage	and Stability	None; Experimental; Not reported		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR Notes: NR		
Temperature	·	NR		
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 Reliabil	ity			
2 0	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	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 2. Other				
Domain 5: 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 Determin	nation	High	

Study Citation	NIOSH (1078) O	acupational health guidaling for 1.1.	ichloroothano	
OECD Harmonized	Vapor Pressure	ccupational nearth guidenne for 1,1-d	incinoroetitane.	
Template:	(apor r ressure			
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 C	Guideline	none; not specified; NR		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	nd Purity	NR; NR; NR; NR Notes: NR		
Temperature		20C (68F)		
System Stondard Deviation Results				
Pasults Datails		NR		
Results Details		INK		
			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 Reliabili	tv			
Domain 2. Test Kenden	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:	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	Matria 5.	Detabases	M. J.	
	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	y Determina	ation	High	

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

Study Citation:	NLM, (2018). I	PubChem: Hazardous Substance Data Ba	ank: 1,1-Dichloro	ethane, 75-34-3.
Tomplete.	vapor riessure			
	5026110			
HERU ID;	3920110			
			EXTRACTIO	N
Parameter		Data		
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		
Temperature		25°C		
System		Not Reported		
Standard Deviation Results	8	Not Reported		
Results Details		Not Reported		
			FVAL HATIO	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: Tast Paliabil	it.,			
Domain 2. Test Kenabi	Motrio 2:	Paliability/Unbiased	Madium	There is no indication that the methodology for producing the information was biased
	Metric 5.	(Mathead Objectionity)	Medium	towards a particular product or outcome
	Metric 1.	(Method Ubjectivity) Reliability/Analytical Method	Medium	Analytical mathed is unknown but is likely to be appropriate based on the deta's inclu
	Meure 4.	Kenability/Anarytical Method	Wedium	sion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other	34.5.5		TT' 1	
	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.
	ty Datamas	notion	High	
	iy Determi	nauvn	nigii	

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

Study Citation: OECD Harmonized	RIVM, (2007). E Vapor Pressure	cotoxicologically based environmental	risk limits for sev	veral volatile aliphatic hydrocarbons. :217.
HERO ID:	5159900			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		25930 - Pa		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Guideline	None; Extrapolated; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	nd Purity	NR; NR; NR; NR		
Temperature		25 deg C		
System		NR		
Standard Deviation Results		NR		
Results Details		Extrapolated by the Antoine equation.		
				NI
Domain		Metric	Poting	Comments
Domain 1: Substance		Metric	Katilig	Comments
Domain 1. Substance	Matric 1:	Paprasantativanass	High	Date are measured or actimated for the subject chemical substance
	Metric 1.	Appropriatonoso	Ligh	Magnum d data are consistent with the subject chemical substance.
	Metric 2.	Appropriateness	nıgli	measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabili	ity			
	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:	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
				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: Weast 1972 - 1973

Study Citation: OECD Harmonized	RIVM, (2007). E Vapor Pressure	cotoxicologically based environmental	risk limits for sev	veral volatile aliphatic hydrocarbons. :217.
HERO ID:	5159900			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		30260 - Pa		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Guideline	None; Extrapolated; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	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 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:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Denseir 2: Other				
Domain 5. 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 Determin	ation	High	

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

Study Citation: OECD Harmonized	RIVM, (2007). E Vapor Pressure	cotoxicologically based environmental	risk limits for sev	veral volatile aliphatic hydrocarbons. :217.
HERO ID:	5159900			
			EXTRACTIO	 N
Parameter		Data		
Vapor Pressure		30360 - Pa		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Guideline	None; Extrapolated; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Temperature		25 deg C		
System		NR		
Standard Deviation Results		NR		
Results Details		Extrapolated by the Antoine equation.		
D .			EVALUATIO	
Domain		Metric	Rating	Comments
Domain 1: Substance	N . · 1		TT' 1	
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
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				
Domain 5. Otter	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 Determin	ation	High	

* Related References: Primary Source: Stephenson and Malanowski 1987

Study Citation: OECD Harmonized	RIVM, (2007). E Vapor Pressure	cotoxicologically based environmental	risk limits for sev	veral volatile aliphatic hydrocarbons. :217.		
HERO ID:	5159900					
	EXTRACTION					
Parameter		Data				
Vapor Pressure		29810 - Pa				
CASRN and Test Material		75-34-3; 1,1-Dichloroethane				
Confidentiality, Type, and C	Guideline	None; Extrapolated; Not reported				
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR				
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR				
Temperature		25 deg C				
System		NR				
Standard Deviation Results		NR				
Results Details		Extrapolated by the Antoine equation.				
				NT		
Domain		Metric	E VALUATIO	Comments		
Domain 1: Substance		Mettic	Katilig	Comments		
Domain 1. Substance	Metric 1	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,		
	Metric 2.	Appropriateness	Ingn	Measured data are consistent with the subject chemical substance structural readires.		
Domain 2: Test Reliabil	ity					
	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:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.		
Domain 5. Otter	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 Determin	ation	High			

* Related References: Primary Source: Stull 1947 HERO ID 41570

Study Citation: OECD Harmonized	RIVM, (2007). E Vapor Pressure	Ecotoxicologically based environmenta	l risk limits for se	veral volatile aliphatic hydrocarbons. :217.
HERO ID:	5159900			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		24274 - Pa		
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	und 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			6	
	Metric 1:	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			
Domain 2. Test Kendon	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:	Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was used.
Demain 2: Other				
Domain 3: Other	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determination H				

* Related References: Primary Source: Rex 1906

Study Citation: RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217. OECD Harmonized Vapor Pressure							
HERO ID:	5159900						
EXTRACTION							
Parameter		Data					
Von on Drossung		260 5 0 Ba					
Vapor Pressure		50950 - Pa 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					
Temperature		30 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							
2 011411 21 1000 1001401	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 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 and use OR includes references to the original sources.			
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.			
Overall Quality Determination			High				

Study Citation: OECD Harmonized	RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217. Vapor Pressure							
Template:	apor ricosare							
HERO ID:	5159900							
EXTRACTION								
Parameter		Data						
Vapor Pressure		30100 - Ра						
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 Paliability								
Domain 2. Test Kellauli	Metric 3.	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased				
	Methe 5.	(Mathad Objectivity)	Wedlum	towards a particular product or outcome				
	Metric 1.	(Method Objectivity) Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was				
	Wietrie 4.	Kenability/Analytical Method	Low	used.				
Domain 3: Other	36.5.5							
	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.
Vapor Pressure | | | |
|------------------------------------|---|----------------------------------|-----------|--|
| HERO ID: | 5159900 | | | |
| | | | EXTRACTIO | N |
| 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 | e, and Stability | NR; NR; NR; NR | | |
| Radiolabel, Source, State, a | and Purity | NR; NR; NR; NR | | |
| Temperature | | 25 deg C | | |
| System | | NR | | |
| Standard Deviation Results | | NR | | |
| Results Details | | Not Reported | | |
| | | | EVALUATIO | N |
| Domain | | Metric | Rating | Comments |
| Domain 1: Substance | | Weute | Rating | Connients |
| Domain 1. Substance | Metric 1 | Representativeness | High | Data are measured or estimated for the subject chemical substance |
| | Metric 2: | Appropriateness | High | Massured data are consistent with the subject chemical substance structural features |
| | Wietrie 2. | Appropriateness | Ingn | Weasured data are consistent with the subject enclinear substance subctural reatures. |
| 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) | т | 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 | | | | |
| Somen S. Ould | 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 Determin | ation | High | |

* Related References: Primary Source: Dilling 1977 HERO ID 18370

Study Citation: OECD Harmonized	RIVM, (2007). Vapor Pressure	Ecotoxicologically based environmenta	al risk limits for se	veral volatile aliphatic hydrocarbons. :217.
HERO ID:	5159900			
-			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		30260 - Pa		
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, a	and Purity	NR; NR; NR; NR		
Temperature		25 deg C		
System		NR		
Standard Deviation Results	3	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 Reliabil	lity			
	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:	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: Boublik et al. 1984 HERO ID 194873

PUBLIC RELEASE DRAFT July 2024 Vapor Pressure

1,1-Dichloroethane

Study Citation:	RSC, (2019). Cl	hemSpider: 1,1-Dichloroethane.			
OECD Harmonized	Vapor Pressure				
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 C	Guideline	None; Experimental; Not reported			
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR			
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR			
Temperature		Not Reported			
System		Not Reported			
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. Tost Daliabil	:4				
Domain 2. Test Kenadii	Metric 3:	Paliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased	
	Methe 5.	(Mathad Objectivity)	Wedium	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-	
		Tenaonity, mary tour method		sion in a peer-reviewed/recognized database or other secondary source.	
Domain 2. Other					
Domain 5: Other	Matric 5:	Databases	High	Date is from a publicly available database that references a pear reviewed course	
	Matria 6:	Madala	nign N/A	Data is from a publicly available database that references a peer-reviewed source.	
	wieure 0.	1/100618	IN/A	Rating of uns factor is not applicable to this kind of information.	
Overall Qualit	Avanall Auglity Determination Uigh				
	y Determin	11 a 11011	Ingli		

* Related References: NIOSH

PUBLIC RELEASE DRAFT July 2024 Vapor Pressure

1,1-Dichloroethane

Study Citation: OECD Harmonized	Rumble, J. R. (2 Vapor Pressure	018). Flammability of chemical substand	ces. :16-16 - 16-3	32.
Template.	vapor r ressure			
HERO ID:	6655446			
			EXTRACTIO	N
Parameter		Data		
Vapor Pressure		= 30.5 kPa		
CASRN and Test Material		Not Reported; 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		
Temperature		25°C		
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 substance structural features.
Domain 2: Test Reliabil	ity			
2 chian 2. Tost Renabil	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 5. 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 Determin	nation	High	

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 water. logKow			
Template:				
HERO ID:	5155634			
	EXTRACTION			
Parameter	Data			
log k _{ow}	1.79			
CASRN and Test Material	75-34-3; 1,1-Dichloroethane			
Confidentiality, Type, and C	uideline None; calculation; NR			
Solvent, Reactivity, Storage	and Stability NA; NA; NA			
Radiolabel, Source, State, a	nd Purity NA; NA; NA Notes: NA			
Temperature	NA			
System	NA			
рН	NA			
Results Details Method	NA			
Standard Deviation Results	1 (for kow)			
Results Details	Reported as Kow = 62 ± 1 (unitless). Reported values are mean and standard deviation of the values found in a handbook.			
	EVALUATION			

			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	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				
	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.

Study Citation: OECD Harmonized	Elsevier, (2019) logKow	. Reaxys: physical-chemical property dat	ta for 1,1-dichlor	oethane. CAS Registry Number: 75-34-3
HERO ID:	5926414			
			EXTRACTIO	N
Parameter		Data		
log k _{ow}		1.75 - 1.8		
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		
Temperature		Not Reported		
System		Not Reported		
рН		Not Reported		
Results Details Method		Not Reported		
Standard Deviation Results		Not Reported		
Results Details		@ 25 C; 9 data points were reported; 4 c the range of measured at non-standard or	of these values wer unreported temper	e reported in the range of 1.75-1.8 at standard temperature; 5 data points were outside ratures.
			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: Tost Daliabil	t ,			
Domain 2. Test Kellabil	Metric 3.	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	Metric 5.	(Method Objectivity)	Wedium	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				
Domanii J. Ouloi	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determination High				

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

Study Citation: OECD Harmonized	Mueller, M., K logKow	lein, W. (1992). Comparative evaluation	of methods predic	cting water solubility for organic compounds. Chemosphere 25(6):769-782.
HERO ID:	654554			
			EXTRACTIO	N
Parameter		Data		-
log k _{ow}		1.78		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Guideline	None; Calculation; 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		
pH		Not reported		
Results Details Method		Not reported		
Standard Deviation Results	5	Not reported		
Results Details		calculated Pow-values -MedChem-Soft	ware 1989	
			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	Calculated data consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	ity			
Domain 2. Test Kenabir	Metric 3	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-
	Wette 5.	(Method Objectivity)	Ingn	tion, and the methodology's objective is clear.
	Metric 4:	Reliability/Analytical Method	N/A	This matrix is not applicable to this calculated data.
		· ·		
Domain 3: Other				
	Metric 5:	Databases	N/A	This matrix is not applicable to this calculated data.
	Metric 6:	Models	High	The model had a defined, unambiguous endpoint and the model performance was known.
Overall Qualit	ty Determi	nation	High	
	ly Determin	nauvii	Ingii	

Study Citation: OECD Harmonized	NLM, (2018). H logKow	PubChem: Hazardous Substance Data Ba	ank: 1,1-Dichloro	ethane, 75-34-3.
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 C	Guideline	None; Experimental; Not Reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	nd Purity	NR; NR; NR; NR		
Temperature		Not Reported		
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.
Demain 2. Test Delishil				
Domain 2: Test Kellabili	ILY Matria 2:	Paliability/Unbiased	Madime	There is no indication that the methodology for my desire the information and b'
	Metric 5.	(Mathad 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-
	Metho II	itemesting/i mary dear medioa	medium	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 source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determination			High	

* 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 environmenta	ıl risk limits for sev	veral volatile aliphatic hydrocarbons. :217.
HERO ID:	5159900			
			EXTRACTIO	N
Parameter		Data		
log k _{ow} CASRN and Test Material Confidentiality, Type, and C Solvent, Reactivity, Storage Radiolabel, Source, State, a Temperature System pH Results Details Method Standard Deviation Results Results Details	Guideline e, and Stability nd Purity	1.92 - 75-34-3; 1,1-Dichloroethane None; experimental; Not reported NR; NR; NR; NR NR; NR; NR Notes: NR NR NR NR NR NR NR NR NR NR		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	Metric 1: Metric 2:	Representativeness Appropriateness	High High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Pelishili	fx7			
Domain 2. Test Kenaom	Metric 3:	Reliability/Unbiased (Method Objectivity) Reliability/Analytical Method	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
		Kenaomty// maryticar wiethou	Low	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: Hansch and Leo 1979 HERO ID 9837

Study Citation: OECD Harmonized	RIVM, (2007). logKow	Ecotoxicologically based environmenta	al risk limits for sev	veral volatile aliphatic hydrocarbons. :217.
HERO ID:	5159900			
			EXTRACTIO	N
Parameter		Data		
log k _{ow} CASRN and Test Material Confidentiality, Type, and C Solvent, Reactivity, Storage Radiolabel, Source, State, a Temperature System pH Results Details Method	Guideline , and Stability nd Purity	1.68 - 75-34-3; 1,1-Dichloroethane None; experimental; Not reported NR; NR; NR; NR NR; NR; NR Notes: NR NR NR NR NR		
Standard Deviation Results		NR		
Results Details		Not Reported		
				AT
Domain		Metric	EVALUATIO Rating	Comments
Domain 1: Substance				
	Metric 1: Metric 2:	Representativeness Appropriateness	High High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features.
Domain 2. Test Reliabili	ty			
Domani 2. Test Kenaohi	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	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: Bhatia and Sandler 1995

Study Citation: OECD Harmonized	RIVM, (2007). logKow	Ecotoxicologically based environmenta	ıl risk limits for sev	veral volatile aliphatic hydrocarbons. :217.
HERO ID:	5159900			
			EXTRACTIO	N
Parameter		Data		
log k _{ow} CASRN and Test Material Confidentiality, Type, and C Solvent, Reactivity, Storage Radiolabel, Source, State, a Temperature System pH Results Details Method Standard Deviation Results Results Details	Guideline e, and Stability and Purity	1.89 - 75-34-3; 1,1-Dichloroethane None; experimental; Not reported NR; NR; NR; NR NR; NR; NR Notes: NR NR NR NR NR NR NR NR		
Results Details		infinite dilution activities.		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	Metric 1: Metric 2:	Representativeness Appropriateness	High High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabil	itv			
	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
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: Tse and Sandler 1994

Study Citation: OECD Harmonized	RIVM, (2007). logKow	Ecotoxicologically based environmenta	al risk limits for sev	veral volatile aliphatic hydrocarbons. :217.
HERO ID:	5159900			
			EXTRACTIO	N
Parameter		Data		
log k _{ow} CASRN and Test Material Confidentiality, Type, and G Solvent, Reactivity, Storage Radiolabel, Source, State, a Temperature System pH Results Details Method Standard Deviation Results Results Details	Guideline e, and Stability and Purity	1.79 - 75-34-3; 1,1-Dichloroethane None; experimental; Not reported NR; NR; NR; NR NR; NR; NR Notes: NR NR Shake flask NR GC NR Not Reported		
			EXALLIATIO	AT
Domain		Metric	EVALUATIO Rating	Comments
Domain 1: Substance			8	
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
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 was reported in low detail.
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 et al. 1975 HERO ID 29212

Study Citation: OECD Harmonized Template:	RIVM, (2007). logKow	Ecotoxicologically based environmenta	al risk limits for sev	veral volatile aliphatic hydrocarbons. :217.		
HERO ID:	5159900					
			EXTRACTIO	N		
Parameter		Data				
log k _{ow} CASRN and Test Material Confidentiality, Type, and C Solvent, Reactivity, Storage Radiolabel, Source, State, a Temperature System pH Results Details Method Standard Deviation Results Results Details	Guideline , and Stability nd Purity	1.82 - 75-34-3; 1,1-Dichloroethane None; experimental; Not reported NR; NR; NR; NR NR; NR; NR Notes: NR NR NR NR NR NR NR NR NR 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	Hıgh	Measured data are consistent with the subject chemical substance structural features.		
Domain 2. Test Reliabili	ty					
Domani 2. Test Kenaoni	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	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						
Domain 5. Otier	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: Bhatia and Sandler 1995

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1,1-Dichloroethane

Study Citation: OECD Harmonized	U.S. EPA, (2019 logKow)). Chemistry Dashboard Information fo	r 1,1-Dichloroeth	ane. 75-34-3
Template:				
HERO ID:	5926139			
			EXTRACTIO	N
Parameter		Data		
		1.70		
IOg K _{ow}		1.79 75.34.3:1.1 Dichloroethane		
CASKIN and Test Material	Zuidalina	None: Experimental: Not Reported		
Solvent Reactivity Storage	and Stability	NR · NR · NR · NR		
Radiolabel Source State a	and Purity	NR: NR: NR		
Temperature	and I diffy	Not Reported		
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 Reliabil	ity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu- sion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other	M. () 5		TT: 1	
	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 Qualit	y Determi	nation	High	

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

Study Citation:	California Office of in drinking water.	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:	2				
HERO ID:	5155634				
			EXTRACTION		
Parameter		Data			
Water Solubility		5170 mg/L			
CASRN and Test Material		75-34-3; 1,1-Dichloroethane			
Confidentiality, Type, and C	Guideline	None; calculation; NA			
Solvent, Reactivity, Storage	e, and Stability	NA; NA; NA; NA			
Radiolabel, Source, State, a	nd Purity	NA; NA; NA; NA Notes: NA			
Temperature		NA			
System		NA			
рН		NA			
Results Details Method		NA			
Standard Deviation Results		313			
Results Details		Reported values are mean and sta	indard 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 Dalishili					

Overall Qual	ity Determ	ination	Medium	
	Metric 6:	Models	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 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.
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
Domain 2: Test Renat	bility			

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

Study Citation: OECD Harmonized	Canada,, G.o. (20) Water Solubility	21). Fact sheet: 1,1-dichloroethane.		
HERO ID:	7309759			
		F	EXTRACTIO	N
Parameter		Data		
Water Solubility		5,000 - mg/L		
CASRN and Test Material		75-34-3; 1,1-dichloroethane		
Confidentiality, Type, and C	Juideline	none; not specified; NR		
Solvent, Reactivity, Storage	, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	nd Purity	NR; NR; NR; NR Notes: moderately solubl	e	
Temperature		room temperature		
System		NR		
pH		NR		
Results Details Method		NR		
Standard Deviation Results		NR		
Results Details		Not Reported		
		I	EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.
Domain 2. Test Reliabili	tv			
Bomain 2. Test Kelldolli	Metric 3.	Reliability/Unbiased	High	There is no indication that the methodology for producing the information was biased
	Medice 5.	(Method Objectivity)	mgn	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 5. 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 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.

Study Citation:	Chen, F.,ei, Freedr	Chen, F.,ei, Freedman, D. L., Falta, R. W., Murdoch, L. C. (2012). Henry's law constants of chlorinated solvents at elevated temperatures. Chemosphere				
OECD Harmonized	86(2):156-165. Water Solubility					
Template:						
HERO ID:	1739466					
D		F	EXTRACTIO	N		
Parameter		Data				
Water Solubility		5402 5471 mg/l				
CASRN and Test Material		75-34-3 · 1 1-Dichloroethane				
Confidentiality Type, and C	Tuideline	None: Experimental: Not reported				
Solvent, Reactivity, Storage	and Stability	NR: NR: NR				
Radiolabel, Source, State, a	nd Purity	NR; TCI; NR; NR				
Temperature	2	8-75°C				
System		Sufficient amount neat liquid added to 160 i	mL bottle contai	ining 150 mL DDI water - nonaqueous phase of chemical present. Incubated 1 week		
pH		Not Reported				
Results Details Method		The headspace concentrations by GC. Using	g externally prej	pared standards for each compound		
Standard Deviation Results		0.40-3.85%				
Results Details		8 deg C, 5403 mg/L, 0.40%SD21 deg C, 5 mg/L, 3.85%SD	490 mg/L, 2.65	%SD35 deg C, 5265 mg/L, 2.92%SD60 deg C, 5434 mg/L, 3.47%SD75 deg C, 5471		
]	EVALUATIO	N		
Domain		Metric	Rating	Comments		
Domain 1: Substance						
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.		
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.		
Domain 2: Test Reliabili	ity					
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific ques- 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						
Domain 5. Outer	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are		
	Wette 5.	Databases	Ingn	peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.		
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		
Overall Qualit	y Determina	ation	High			

Study Citation: OECD Harmonized	Dreher, E. L., Beu Water Solubility	tel, K. K., Myers, J. D., Lübbe, T., Kriege	er, S., Pottenge	er, L. H. (2014). Chloroethanes and chloroethylenes. :1-81.	
HERO ID:	4293766				
		ŀ	XTRACTIO	N	
Parameter		Data			
Water Solubility		5500 mg/L			
CASRN and Test Material		75-34-3; Not Reported			
Confidentiality, Type, and C	Guideline	None; Experimental; Not Reported			
Solvent, Reactivity, Storage	, and Stability	Not reported; Not reported; Not reported; N	ot reported		
Radiolabel, Source, State, a	nd Purity	Not reported; Not reported; Not reported; N	ot reported Note	es: Not reported	
Temperature		20°C			
System		Not reported			
pH		Not reported			
Results Details Method		Not reported			
Standard Deviation Results		Not reported			
Results Details		Reported as 0.55 wt%			
		Ι	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 Reliabili	tv				
	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 non-standard but is expected to be appropriate OR the analyti- cal method is unknown but 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 Qualit	Overall Quality Determination High				

Study Citation: OECD Harmonized	Elsevier, (2019). Water Solubility	Reaxys: physical-chemical property dat	a for 1,1-dichlor	oethane. CAS Registry Number: 75-34-3	
HERO ID:	5926414				
			EXTRACTIO	N	
Parameter		Data			
Water Solubility CASRN and Test Material Confidentiality, Type, and C Solvent, Reactivity, Storage Radiolabel, Source, State, a Temperature System pH Results Details Method Standard Deviation Results Results Details	Guideline e, and Stability nd Purity	5060 mg/L 75-34-3; 1,1-Dichloroethane None; Experimental; Not reported NR; NR; NR; NR NR; NR; NR 25°C Not Reported Not reported Reported as 0.506 g in 100 g H2O at 25 0 Not Reported 10 data points were reported in Reaxys; non-standard temperatures.	C 1 value was repo	rted at 0.506 g/100 g H2O at standard temperature; 9 data points were measured at	
				N	
Domain		Metric	Rating	Comments	
Domain 1: Substance			6		
	Metric 1:	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 Delishili					
Domain 2. Test Kenaolin	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.	
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu- sion in a peer-reviewed/recognized database or other secondary source.	
Domain 3: Other					
	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Qualit	Overall Quality Determination High				

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

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			
HERO ID:	654554			
		I	EXTRACTIO	N
Parameter		Data		
Water Solubility CASRN and Test Material Confidentiality, Type, and G Solvent, Reactivity, Storage Radiolabel, Source, State, a Temperature System pH Results Details Method Standard Deviation Results Results Details	Guideline e, and Stability and Purity	5057 mg/L 75-34-3; 1,1-Dichloroethane None; Calculation; Not reported NR; NR; NR; NR NR; NR; NR Not reported Statistical estimation in relation to partition Not reported Not Reported Not Reported Reported as 5.11E-2 mol/L	a coefficients.	
			FVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1: Metric 2:	Representativeness Appropriateness	High Medium	Data are measured or estimated for the subject chemical substance. Calculated data consistent with the subject chemical substance structural features.
Domain 2. Test Reliabil	ity			
Domain 2. Tost Renadin	Metric 3:	Reliability/Unbiased (Method Objectivity) Reliability/Analytical Mathed	High	The methodology for producing the information is designed to answer a specific ques- tion, and the methodology's objective is clear.
	Meule 4.	Kenaomty/Anarytical Method	1 N/A	
Domain 3: Other	Metric 5: Metric 6:	Databases Models	N/A High	This matrix is not applicable to this calculated data. The model had a defined, unambiguous endpoint and the model performance was known.
Overall Qualit	ty Determin	ation	High	

Study Citation: OECD Harmonized	NCBI, (2020). I Water Solubility	PubChem Compound Summary for CID	6365: 1,1-Dichlo	proethane.
Template:	5			
HERO ID:	10180525			
			EXTRACTIO	N
Parameter		Data		
Water Solubility		9700 - mg/L		
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	nd 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 Reliabili	ity			
	Metric 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 non-standard but is expected to be appropriate OR the analyti- cal method is unknown but 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
				use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	y Determi	nation	High	

* Related References: Citing Dreher, 2014.

Study Citation:	NIOSH, (2007).	NIOSH pocket guide to chemical hazar	rds.		
OECD Harmonized	water Solubility				
HERO ID.	192177				
	1)2111				
Descenter		Dete	EXTRACTIO	N	
Parameter		Data			
Water Solubility		0.6 - g/100 ml			
CASRN and Test Material		/5-34-3; 1,1-Dichloroethane			
Confidentiality, Type, and C		None; Experimental; Not reported			
Solvent, Reactivity, Storage	e, and Stability	NK; NK; NK; NK			
Kadiolabel, Source, State, a	nd Purity	NR; NR; NR; NR Notes: NR			
Sustan		08			
System		NR			
PH Recults Details Mathad		NR			
Standard Daviation Paculta		NR			
Paculte Dataile		Solubility in water at 68°E reported as 6	hy weight (g/100		
Results Details		Solubility in water at 00 1 reported as /	to by weight (g/100	,	
			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	ity				
_ 5.1.4.1. 2. 105t Rendom	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	Matria 5	Detahasas	M - 1:	The data are from a convertication have to the training of the	
	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	y Determi	nation	High		

Study Citation: OECD Harmonized	NIOSH, (1978). Water Solubility	Occupational health guideline for 1,1-dick	hloroethane.	
HERO ID:	8435203			
			EXTRACTIO	N
Parameter		Data		
Water Solubility CASRN and Test Material Confidentiality, Type, and C Solvent, Reactivity, Storage Radiolabel, Source, State, a Temperature System pH Results Details Method Standard Deviation Results Pasults Details	Guideline e, and Stability nd Purity	< 1000 mg/L 75-34-3; 1,1-DICHLOROETHANE none; not specified; NR water; NR; NR; NR NR; NR; NR; NR Notes: NR 20C (68F) NR NR NR NR NR NR		
Results Details		Reported as less than 0.1 g/100 g water		
			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			
2	Metric 3:	Reliability/Unbiased	N/A	Rating of this factor is not applicable to this kind of information.
	Metric 4:	Reliability/Analytical Method	N/A	Rating of this factor is not applicable to this kind of information.
Domain 3: Other	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer-review, public availability, or the inclusion of references to
	Metric 6:	Models	N/A	original sources. Rating of this factor is not applicable to this kind of information.
Overall Qualit	y Determin	nation	High	

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

Study Citation:	Nirmalakhandar	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			
OECD Harmonized	Water Solubility	/ 22(3).326-336. V			
Template: HERO ID:	654558				
			EXTRACTIO	N	
Parameter		Data			
Water Solubility		Not Reported			
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; NR			
Temperature	•	Not Reported			
System		Not Reported			
pH		Not Reported			
Results Details Method		$\log S = -0.321$			
Standard Deviation Results		Not Reported			
Results Details		Not Reported			
			EVALUATIO	Ν	
Domain		Metric	Rating	Comments	
Domain 1: Substance					
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.	
Domain 2: Test Reliabil	ity				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.	
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate.	
Domain 2: Other					
Domain 5: 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.	
Overall Qualit	ty Determi	nation	High		

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

Study Citation:	Nirmalakhandar	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			
OECD Harmonized	Water Solubility	/ 22(3).326-336.			
Template:	-				
HERO ID:	654558				
			EXTRACTIO	N	
Parameter		Data			
Water Solubility		Not Papartad			
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			
Radiolabel, Source, State, a	and Purity	NR: NR: NR			
Temperature		Not Reported			
System		Not Reported			
pH		Not Reported			
Results Details Method		$\log S = -0.321$			
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 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					
Domain J. Oulor	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for high des-	
	incure 5.	Duttouses	Weatum	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.	
Overall Qualit	ty Determi	nation	High		

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

Study Citation: OECD Harmonized	NLM, (2018). Pu Water Solubility	ubChem: Hazardous Substance Data B	ank: 1,1-Dichloro	ethane, 75-34-3.
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 C	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	nd Purity	NR; NR; NR; NR		
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: Tast Daliahili	f			
Domain 2. Test Kellaulii	Metric 3.	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	Meure 5.	(Method Objectivity)	Wicdium	towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu-
				sion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain 5. Oulei	Matric 5.	Databases	Uich	Date is from a publicly available detabase that manifest references to original severe-
	Metric 5:	Models	nigii N/A	Data is from a publicly available database that provides references to original sources.
	meure 0.	WINGELS	IN/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determination		High		
Z Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y			8	

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

Study Citation: OECD Harmonized	O'Neil, M. J. (20 Water Solubility	013). Ethylidene chloride. 75-34-3. [1,1-	Dichloroethane]	. :705.			
Template.	Water Boldonity						
HERO ID:	5926374						
	5720571						
D (EXTRACTIO	N			
Parameter		Data					
Water Solubility		5000 mg/L					
CASRN and Test Material		75-34-3; 1,1-Dichloroethane					
Confidentiality, Type, and C	Guideline	None; Experimental; Not reported					
Solvent, Reactivity, Storage	, and Stability	NR; NR; NR; NR					
Radiolabel, Source, State, a	nd Purity	NR; NR; NR; NR					
Temperature		Not Reported					
System		Not Reported					
pH		Not reported					
Results Details Method		Originally reported as soluble in 200 part	ts water				
Standard Deviation Results		Not Reported	ot Reported				
Results Details		Not Reported					
			EVALUATIO	Ň			
Domain		Metric	Rating	Comments			
Domain 1: Substance							
	Metric 1:	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	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 peer-reviewed data collection.			
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.			
Overall Quality Determination		High					

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

Study Citation: OECD Harmonized	RIVM, (2007). Water Solubility	Ecotoxicologically based environmenta	al risk limits for sev	veral volatile aliphatic hydrocarbons. :217.	
HERO ID:	5159900				
			EXTRACTIO	N	
Parameter		Data			
Water Solubility		5100 - mg/L			
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	nd 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			6		
	Metric 1:	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 Daliahili					
Domain 2: Test Kellabili	Metric 3.	Reliability/Unbiased	Madium	There is no indication that the methodology for producing the information was biased	
	Meure 5.	(Mathad Objectivity)	Wiedium	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	
			2011	used.	
Domain 3: Other					
Domain 5: Other	Metric 5:	Databases	Uiah	The information or data is from a recognized data collection/repository where data are	
	Metric 5.	Databases	rigi	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					
	J Determin		ingn		

* Related References: Primary Source: Neely 1976 HERO ID 18866

Study Citation: OECD Harmonized	RIVM, (2007). Water Solubility	Ecotoxicologically based environmenta	al risk limits for sev	veral volatile aliphatic hydrocarbons. :217.	
HERO ID:	5159900				
			EXTRACTIO	N	
Parameter		Data			
Water Solubility CASRN and Test Material Confidentiality, Type, and C Solvent, Reactivity, Storage Radiolabel, Source, State, a Temperature System pH Results Details Method Standard Deviation Results	Guideline e, and Stability and Purity	4842 - mg/L 75-34-3; 1,1-Dichloroethane None; experimental; Not reported NR; NR; NR; NR NR; NR; NR Notes: NR 25 deg C NR NR NR NR			
Results Details		Not Reported			
			FVAL HATIO	N	
Domain		Metric	Rating	Comments	
Domain 1: Substance	Metric 1: Metric 2:	Representativeness Appropriateness	High High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features.	
Domain 2: Test Reliabil	itx				
	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.	
Domain 3: Other	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Qualit	Overall Quality Determination High				

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

Study Citation: OECD Harmonized	RIVM, (2007). I Water Solubility	RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217. Water Solubility			
HERO ID:	5159900				
			EXTRACTIO	N	
Parameter		Data			
Water Solubility CASRN and Test Material Confidentiality, Type, and C Solvent, Reactivity, Storage Radiolabel, Source, State, a Temperature System pH	Guideline e, and Stability nd Purity	5075 - mg/L 75-34-3; 1,1-Dichloroethane None; experimental; Not reported NR; NR; NR; NR NR; NR; NR Notes: NR 25 deg C NR NR			
Results Details Method		NR			
Standard Deviation Results Results Details		NK Not Reported			
Results Details		Not Reported			
			EVALUATIO		
Domain		Metric	Rating	Comments	
Domain 1: Substance					
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features.	
Domain 2: Test Reliabil	itv				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.	
	Metric 4:	Reliability/Analytical Method	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: Seidell 1940

Study Citation: OECD Harmonized	RIVM, (2007). E Water Solubility	Ecotoxicologically based environmenta	ıl risk limits for sev	veral volatile aliphatic hydrocarbons. :217.
HERO ID:	5159900			
			EXTRACTIO	N
Parameter		Data		
Water Solubility CASRN and Test Material Confidentiality, Type, and C Solvent, Reactivity, Storage Radiolabel, Source, State, a Temperature System pH Results Details Method	Guideline 2, and Stability nd Purity	5400 - mg/L 75-34-3; 1,1-Dichloroethane None; experimental; Not reported NR; NR; NR; NR NR; NR; NR, NR Notes: NR 30 deg C NR NR NR		
Standard Deviation Results		NR Volumetric		
Results Details		volumente		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance	Metric 1: Metric 2:	Representativeness Appropriateness	High High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features.
Domain 2: Test Reliabili	itv			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	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 Rex 1906

Study Citation: OECD Harmonized	RIVM, (2007). E Water Solubility	cotoxicologically based environmenta	l risk limits for sev	veral volatile aliphatic hydrocarbons. :217.	
HERO ID:	5159900				
			EXTRACTIO	N	
Parameter		Data			
Water Solubility CASRN and Test Material Confidentiality, Type, and C Solvent, Reactivity, Storage Radiolabel, Source, State, a Temperature System pH Results Details Method Standard Deviation Results	Guideline 9, and Stability nd Purity	5500 - mg/L 75-34-3; 1,1-Dichloroethane None; experimental; Not reported NR; NR; NR; NR NR; NR; NR Notes: NR 20 deg C NR NR NR NR NR			
Results Details		Volumetric			
			EVALUATIO	N	
Domain		Metric	Rating	Comments	
Domain 1: Substance	Metric 1: Metric 2:	Representativeness Appropriateness	High High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features.	
Domain 2: Test Reliabili	ty				
Domain 2. Test Kellabili	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.	
Domain 3: Other	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Qualit	Overall Quality Determination High				

* Related References: Primary Source Rex 1906

Study Citation: OECD Harmonized	RIVM, (2007). Water Solubility	Ecotoxicologically based environmenta	al risk limits for sev	veral volatile aliphatic hydrocarbons. :217.	
HERO ID:	5159900				
			EXTRACTIO	N	
Parameter		Data			
Water Solubility CASRN and Test Material Confidentiality, Type, and C Solvent, Reactivity, Storage Radiolabel, Source, State, a Temperature System pH Results Details Method Standard Deviation Results	Guideline e, and Stability Ind Purity	5555 - mg/L 75-34-3; 1,1-Dichloroethane None; experimental; Not reported NR; NR; NR; NR NR; NR; NR Notes: NR 25 deg C NR NR NR NR NR			
Results Details		Not Reported			
			EVALUATIO	N	
Domain		Metric	Rating	Comments	
Domain 1: Substance					
	Metric 1: Metric 2:	Appropriateness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	nigii	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 21 Other					
Domain 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 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: Wright and Schaffer 1932 HERO ID 6836791

Study Citation: OECD Harmonized	RIVM, (2007). E Water Solubility	RIVM, (2007). Ecotoxicologically based environmental risk limits for several volatile aliphatic hydrocarbons. :217. Water Solubility			
Template: HERO ID:	5159900				
			EXTRACTIO	N	
Parameter		Data			
Water Solubility CASRN and Test Material Confidentiality, Type, and C Solvent, Reactivity, Storage Radiolabel, Source, State, a Temperature System pH Results Details Mathod	Guideline e, and Stability Ind Purity	5060 - mg/L 75-34-3; 1,1-Dichloroethane None; experimental; Not reported NR; NR; NR; NR NR; NR; NR Notes: NR 25 deg C NR NR			
Standard Deviation Results		NR			
Results Details		Not Reported			
Domain		Metric	EVALUATIO Rating	N Comments	
Domain 1: Substance		meane	Tuung	Comments	
	Metric 1: Metric 2:	Representativeness Appropriateness	High High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features.	
Domain 2: Test Reliabili	ity				
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.	
	Metric 4:	Reliability/Analytical Method	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	
	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.	
Overall Quality Determination High					

* Related References: Primary Source: Seidell 1941

Study Citation: OECD Harmonized	RIVM, (2007). Water Solubility	Ecotoxicologically based environmenta	al risk limits for sev	veral volatile aliphatic hydrocarbons. :217.			
HERO ID:	5159900						
EXTRACTION							
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					
pH		NR					
Results Details Method		NR					
Standard Deviation Results		NR					
Results Details		Not Reported					
Domain		Metric	Rating	Comments			
Domain 1: Substance			6				
	Metric 1:	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 towards a particular product or outcome			
	Metric 4:	(Method Objectivity) Reliability/Analytical Method	Low	The analytical method is unknown and there is no indication that a reliable method was			
	Wette 4.	Kenability// Marytear Wethod	Low	used.			
Domain 2: Other							
Domain 5. Oulei	Matric 5:	Databases	High	The information or date is from a recognized date collection/repository where date are			
	Metric 5.	Databases	rigi	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 Auglity Determination High							
	y Determin	11411011	ingn				

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

Study Citation: OECD Harmonized	RIVM, (2007). I Water Solubility	Ecotoxicologically based environmenta	ıl risk limits for sev	veral volatile aliphatic hydrocarbons. :217.			
HERO ID:	5159900						
EXTRACTION							
Parameter		Data					
Water Solubility CASRN and Test Material 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		5495 - mg/L 75-34-3; 1,1-Dichloroethane None; experimental; Not reported NR; NR; NR; NR NR; NR; NR Notes: NR 25 deg C NR NR NR NR NR NR NR NR NR					
Domain		Metric	Rating	Comments			
Domain 1: Substance							
	Metric 1: Metric 2:	Representativeness Appropriateness	High High	Data are measured or estimated for the subject chemical substance. Measured data are consistent with the subject chemical substance structural features.			
Domain 2: Test Reliability							
20 num 21 rest trendsh	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.			
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: Isnard and Lambert 1989
| Study Citation: | RSC, (2019). Che | mSpider: 1,1-Dichloroethane. | | |
|--------------------------------------|------------------|---|----------|---|
| OECD Harmonized | Water Solubility | 1 | | |
| Template: | | | | |
| HERO ID: | 5926256 | | | |
| | | E | XTRACTIO | N |
| Parameter | | Data | | |
| | | | | |
| Water Solubility | | 6000 mg/L | | |
| CASRN and Test Material | | 75-34-3; 1,1-Dichloroethane | | |
| Confidentiality, Type, and C | Juideline | None; Experimental; Not reported | | |
| Solvent, Reactivity, Storage | , and Stability | NR; NR; NR; NR | | |
| Radiolabel, Source, State, a | nd Purity | NR; NR; NR; NR | | |
| Temperature | | Not Reported | | |
| System | | Not Reported | | |
| pH | | Not reported | | |
| Results Details Method | | Not Reported | | |
| Standard Deviation Results | | Not Reported | | |
| Results Details | | Reported as 0.6%, assumed weight percent. | | |
| | | | | |
| | | E | VALUATIO | N |
| Domain | | Metric | Rating | Comments |
| Domain I: Substance | 34.1.1 | | TT: 1 | |
| | Metric 1: | Representativeness | High | Data are measured or estimated for the subject chemical substance. |
| | Metric 2: | Appropriateness | High | Measured data are consistent with the subject chemical's physical/chemical properties. |
| Domain 2 [.] Test Reliabili | tv | | | |
| 2 smain 2. Test Rendom | Metric 3: | Reliability/Unbiased | Medium | There is no indication that the methodology for producing the information was biased |
| | methe 5. | (Method Objectivity) | meanann | 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. |
| Demein 2. Other | | | | |
| Domain 5: Other | Matria 5. | Detabases | II:-L | |
| | Matria 6 | Databases | High | Data is from a publicity available database that references a peer-reviewed source. |
| | wietric o: | WIOUEIS | IN/A | kating of this factor is not applicable to this kind of information. |
| Overall Quality Determination | | | High | |
| | | | | |

* Related References: NIOSH

Study Citation: OECD Harmonized	Rumble, J. R. (20 Water Solubility	018). Aqueous solubility and Henry's la	w constants of or	ganic compounds. :5-148 - 5-177.			
HERO ID:	5932745						
			EXTRACTIO	N			
Parameter		Data					
Water Solubility		6200 mg/L					
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	nd Purity	NR; NR; NR; NR					
Temperature		0°C					
System		Not Reported					
pH		Not reported					
Results Details Method		Originally reported as 6.2 g/kg H20, con	Originally reported as 6.2 g/kg H20, converted using CRC handbook's reported water density at 0 C.				
Standard Deviation Results		Not Reported	Not Reported				
Results Details		Not Reported					
				AT			
Domain		Matric	EVALUATIO	N Comments			
Domain 1: Substance		Wieure	Rating	Comments			
Domain 1. Substance	Metric 1	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			
	Methe 2.	Appropriateness	Ingn	Weasured data are consistent with the subject enclinear s physical/enclinear 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 inclu- sion in a peer-reviewed/recognized database or other secondary source.			
Domain 2. Other							
Domain 5: Other	Matria 5:	Databasas	TT: _1.				
	Metric 5:	Databases	High	Data is from a peer-reviewed data collection.			
	Metric 6:	Models	IN/A	Kating of this factor is not applicable to this kind of information.			
Overall Qualit	y Determir	nation	High				

Study Citation: OECD Harmonized	Rumble, J. R. (2 Water Solubility	2018). Aqueous solubility and Henry's la	w constants of or	rganic compounds. :5-148 - 5-177.		
HERO ID:	5932745					
			EXTRACTIO	N		
Parameter		Data				
Water Solubility		5000 mg/I				
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	nd Purity	NR; NR; NR; NR				
Temperature	•	25°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 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 Reliabili	itv					
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased		
	M-4	(Method Objectivity)	Madian	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 peer-reviewed data collection.		
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		
Overall Qualit	y Determi	nation	High			

Study Citation: OECD Harmonized	Rumble, J. R. (2 Water Solubility	2018). Aqueous solubility and Henry's la	w constants of or	ganic compounds. :5-148 - 5-177.			
HERO ID:	5932745						
			EXTRACTIO	N			
Parameter		Data					
Water Solubility		5000 mg/L					
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, and Purity		NR; NR; NR; NR					
Temperature		50°C					
System		Not Reported					
рН		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					
			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 (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.			
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu- sion 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 Qualit	y Determi	nation	High				

Study Citation: OECD Harmonized	U.S. EPA, (2019) Water Solubility). Chemistry Dashboard Information for	or 1,1-Dichloroeth	ane. 75-34-3
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 C	Guideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	nd Purity	NR; NR; NR; NR		
Temperature		Not Reported		
System		Not Reported		
pH		Not reported		
Results Details Method		Not Reported		
Standard Deviation Results		Not Reported		
Results Details		Not Reported		
			EVALUATIO	N
Domain		Metric	E VALUATION Doting	Comments
Domain 1: Substance		Metric	Katilig	Comments
Domain 1. Substance	Matria 1.	Depresentativanass	High	Data are manying an actimated for the sphinet chemical spheteres
	Metric 2:	Appropriateness	High	Data are measured of estimated for the subject chemical substance.
	Meuric 2.	Appropriateness	nigii	Measured data are consistent with the subject chemical's physical/chemical properties.
Domain 2: Test Reliabili	ity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu- sion in a peer-reviewed/recognized database or other secondary source.
Domain 2: Other				
Domain 5: Other	Matria 5.	Databasas	High	Deterisficant a multiple control to be determined a multiple of the second s
	Metric 5:	Models	High N/A	Data is from a publicity available database that provides references to original sources.
	Metric 0:	widdels	IN/A	kating of this factor is not applicable to this kind of information.
Overall Qualit	y Determin	ation	High	

* Related References: PhysProp. Horvath et al. 1999

Study Citation: OECD Harmonized Template: HERO ID:	 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. Water Solubility 658886 				
	EXTRACTION				
Parameter	Data				
Water Solubility	4991 - 4991 mg/L				
CASRN and Test Material	75-34-3; 1,1-Dichloroethane				
Confidentiality, Type, and C	ideline None; calculation; Not reported				
Solvent, Reactivity, Storage	and Stability NR; NR; NR				
Radiolabel, Source, State, a	l Purity NR; NR; NR				
Temperature	$20^{\circ}C$				
System	Static cell apparatus was designed to specifically to measure the equilibrium vapor pressure of dilute, gravimetrically prepared binary mixtures at constant temperature.				
pН	Not reported				
Results Details Method	MKS Baratron 221 AD differential pressure transducer. The result was then plugged into two mathematical equations to give the water solubility range				
Standard Deviation Results	Not reported				
Results Details	Result reported as 0.0909-0.0909 mol%. MW of 1,1-dichloroethane is 98.96 g/mol; MW of water is 18.02 g/mol; assume density of water is 1 g/mL				

			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features and 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.
Domain 3: Other				
	Metric 5:	Databases	High	The information or data is from a recognized data collection/repository where data are peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.

Study Citation: OECD Harmonized	Dreher, E. L., Be Flash Point	utel, K. K., Myers, J. D., Lübbe, T., Krie	eger, S., Pottenge	er, L. H. (2014). Chloroethanes and chloroethylenes. :1-81.
Template:				
HERO ID:	4293766			
			EXTRACTIO	N
Parameter		Data		
Flash Point		-12 C		
CASKIN and Test Material	C	Name: Experimental National d		
Solvent Resetivity Storeg	Juideline	None; Experimental; Not reported	Not reported	
Radiolabel Source State a	and Purity	Not reported: Not reported: Not reported:	Not reported Not	es. Not reported
System	ind I unity	Closed cup	Not reported Not	s. Not reported
Standard Deviation Results		Not reported		
Results Details		Not reported		
		I I		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu- sion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain 5. Oulor	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 Qualit	v Dotormin	ation	High	
	ly Determin	auvii	Ingli	

Study Citation:	NIOSH, (2007).	NIOSH pocket guide to chemical haza	ards.	
OECD Harmonized	Flash Point			
HERO ID:	192177			
			EVTDACTIO	N
Parameter		Data	EATRACIIO	
Flash Point		2 - F		
CASRN and Test Material		75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Guideline	None; Experimental; closed cup		
Solvent, Reactivity, Storage	, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	nd Purity	NR; NR; NR; NR Notes: NR		
System		closed cup		
Standard Deviation Results		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 Reliabili	itv			
	Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-
		(Method Objectivity)	0	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.
Domain 3: Other				
Somula S. Ould	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: OECD Harmonized	NLM, (2018). F Flash Point	PubChem: Hazardous Substance Data I	Bank: 1,1-Dichloro	ethane, 75-34-3.
Template:	i fusif i offic			
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, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
System		Not Reported		
Standard Deviation Results	3	Not reported		
Results Details		-10.0°C (14.0°F)		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	ity			
	Metric 3:	Reliability/Unbiased	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				
Domanii J. Oulei	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	nation	High	

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

Study Citation: OECD Harmonized	NLM, (2018). P Flash Point	PubChem: Hazardous Substance Data E	3ank: 1,1-Dichloro	ethane, 75-34-3.
HERO ID:	5926110			
			EXTRACTIO	N
Parameter		Data		
		15.0		
Flash Point		-17 C		
CASKIN and Test Material	"wideline	Noney Experimental: Closed our		
Solvent Reactivity Storage	and Stability	NR · NR · NR · NR		
Radiolabel Source State	and Purity	NR: NR: NR		
System	and I diffy	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 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 inclu- sion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain 5. Other	Metric 5:	Databases	High	Data is from a publicly available, peer-reviewed database that provides references to a peer-reviewed data collection.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Quality Determination			High	

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

Study Citation: OECD Harmonized	NLM, (2018). Pu Flash Point	bChem: Hazardous Substance Data Bar	ık: 1,1-Dichloro	ethane, 75-34-3.	
HERO ID:	5926110				
			EXTRACTIO	N	
Parameter		Data			
		14.0			
Flash Point CASEN and Tast Material		14 C 75 24 2:1 1 Dichloroothana			
Confidentiality Type and (Juidalina	None: Experimental: Open cup			
Solvent Reactivity Storage	and Stability	NR· NR· NR			
Radiolabel Source State a	and Purity	NR: NR: NR			
System		Not Reported			
Standard Deviation Results		Not reported			
Results Details		14°C (open cup); -8.33 °C (closed 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 Reliabil	ity				
2 011411 21 1000 1001401	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.	
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu- sion in a peer-reviewed/recognized database or other secondary source.	
Domain 2: Other					
Domain 3: Other	Matria 5:	Databases	High	Date is from a publicly available near raviewed database that provides references to a	
	Meure 5:		rigi	peer-reviewed data collection.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Qualit	y Determin	ation	High		

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

Study Citation: OECD Harmonized	NLM, (2018). P Flash Point	PubChem: Hazardous Substance Data E	Bank: 1,1-Dichloro	ethane, 75-34-3.
HERO ID:	5926110			
			EXTRACTIO	N
Parameter		Data		
Flack Daint		560		
CASPN and Test Material		-5.0 C 75.34.3:1.1 Dichloroethane		
Confidentiality Type and	Guideline	None: Experimental: Open cup		
Solvent Reactivity Storage	e and Stability	NR· NR· NR		
Radiolabel, Source, State, a	and Purity	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 Reliabil	itv			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu- sion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain J. Ouler	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	nation	High	

* 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

PUBLIC RELEASE DRAFT July 2024 Flash Point

Study Citation:	RSC (2019) C	hemSnider: 1.1-Dichloroethane		
OECD Harmonized	Flash Point	nemopider. 1,1-Diemoroeutane.		
Template:	i hushi i olin			
HERO ID:	5926256			
	0,20200			N
Paramatar		Data	EATRACIIO	IN
		Data		
Elash Doint		167.0		
CASPN and Test Material		-10.7 C		
Confidentiality Type and	Guideline	None: Experimental: Not reported		
Solvent Reactivity Storage	and Stability	NR · NR · NR		
Radiolabel Source State	and Purity	NR· NR· NR		
System	and Fully	Not Reported		
Standard Deviation Results		Not reported		
Results Details	,	Not Reported		
		Tior 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	5		
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	Matria A.	(Method Objectivity)	Madian	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 5: Other	Matric 5:	Databases	High	Date is from a publicly available database that provides references to the critical record
	Meule J.	Databases	riigii	reviewed source.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	tv Determi	nation	High	
	J Determin		Ingi	

* Related References: NIOSH

Study Citation: OECD Harmonized	RSC, (2019). Ch Flash Point	nemSpider: 1,1-Dichloroethane.		
Template: HERO ID:	5926256			
			EXTRACTION	
Parameter		Data		
		10.0		
Flash Point CASDN and Test Material		-10 C		
CASKIN and Test Material	7	/5-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Juideline	None; Experimental; Not reported		
Padialabal Source State	, and Stability	NR; NR; NR; NR ND: ND: ND: ND		
System	and Fullty	Not Reported		
System Standard Deviation Results		Not reported		
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.
Domain 2: Test Reliabil	itv			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain J. Oulei	Metric 5	Databases	Medium	Data is from a publicly available secondary source with references to non-near reviewed
	metric 5.	Data0asts	Wearun	sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Qualit	ty Determin	nation	Medium	

* Related References: SynQuest

Study Citation: OECD Harmonized	RSC, (2019). Che Flash Point	emSpider: 1,1-Dichloroethane.		
Template:	5026256			
	3920230			
Donomotor		Data	EXTRACTION	
		Data		
Flach Point		60		
CASRN and Test Material		-0 C 75-34-3: 1 1-Dichloroethane		
Confidentiality Type and (Juideline	None: Experimental: Not reported		
Solvent, Reactivity, Storage	and Stability	NR: NR: NR		
Radiolabel, Source, State, a	and Purity	NR: NR: NR		
System		Not Reported		
Standard Deviation Results		Not reported		
Results Details		Not Reported		
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2. Test Reliabil	ity			
2	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 5. Outer	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 Qualit	y Determin	ation	Medium	

* Related References: LabNetwork

Study Citation:	Rumble, J. R. (2	018). Flammability of chemical substa	ances. :16-16 - 16-:	32.			
OECD Harmonized	Flash Point						
Template:							
HERO ID:	6655446						
	EXTRACTION						
Parameter		Data					
Flash Point		-17 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	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 Reliabil	ity						
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased			
	34.1.4	(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							
Domain 5, Other	Metric 5:	Databases	High	Data is from a publicly available, peer-reviewed database that provides references to a peer-reviewed data collection.			
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.			
Overall Quality Determination							

Study Citation: OECD Harmonized	Dreher, E. L., Be Autoflammabilit	eutel, K. K., Myers, J. D., Lübbe, T., K y	rieger, S., Pottenge	er, L. H. (2014). Chloroethanes and chloroethylenes. :1-81.
HERO ID:	4293766			
			EXTRACTIO	N
Parameter		Data		
Auto flammability		458 C		
CASRN and Test Material		75-34-3: 1 1-Dichloroethane		
Confidentiality Type and (Juideline	None: Experimental: Not specified		
Solvent Reactivity Storage	and Stability	NR: NR: NR: NR		
Radiolabel. Source. State. a	and Purity	NR: NR: NR		
Svstem	and I dirity	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 Reliabili	ity			
2011411 21 1000 100140140	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				
Bollum 5. Oulor	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 Qualit	y Determin	nation	High	

Study Citation: OECD Harmonized	NLM, (2018). F Autoflammabili	PubChem: Hazardous Substance Data B	ank: 1,1-Dichloro	ethane, 75-34-3.	
Template:					
HERO ID:	5926110				
			EXTRACTIO	N	
Parameter		Data			
Auto-flammability		458 C			
CASRN and Test Material	~	75-34-3; 1,1-Dichloroethane			
Confidentiality, Type, and C	Guideline	None; Experimental; Not specified			
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR			
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR			
System		Not reported			
Standard Deviation Results	5	Not Reported			
Results Details		Originally reported as 856°F			
Results Value		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 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	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 of other secondary source.	
Domain 3: Other					
	Metric 5:	Databases	High	Data is from a publicly available database that provides references to a peer-reviewed data collection.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Quality Determination Hi					
	y Determin		Ingu		

* 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

PUBLIC RELEASE DRAFT July 2024 Autoflammability

1,1-Dichloroethane

Study Citation: OECD Harmonized	NLM, (2020). I Autoflammabili	PubChem database: compound summar	y: 1,1-dichloroethane.	
Template:	7 utonunnuon			
HERO ID:	6629204			
			EXTRACTION	
Parameter		Data		
Auto-flammability		856 F		
CASRN and Test Material		75-34-3·11-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		
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 Reliabil	ity			
	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:	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.

Study Citation: OECD Harmonized	NLM, (2020). P Autoflammabilit	ubChem database: compound summary	y: 1,1-dichloroethane.	
Template:		5		
HERO ID:	6629204			
			EXTRACTION	
Parameter		Data		
Auto-flammability		458 C		
CASRN and Test Material		75-34-3; 1,1-DCA		
Confidentiality, Type, and C	Guideline	None; Experimental; Not specified		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
System		Not reported		
Standard Deviation Results		Not reported		
Results Details		Not reported		
Results Value		Not Reported		
			EVALUATION	
Domain		Metric	Rating	Comments
Domain 1: Substance			0	
	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	Medium	There is no indication that the methodology for producing the information was biased
	Metric 4:	(Method Objectivity) 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. 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 Qualit	ty Determin	nation	Medium	

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

PUBLIC RELEASE DRAFT July 2024 Autoflammability

Study Citation: OECD Harmonized	Rumble, J. R. (2 Autoflammabili	2018). Flammability of chemical substa	unces. :16-16 - 16-3	32.
Template:		-5		
HERO ID:	6655446			
			EXTRACTIO	N
Parameter		Data		
Auto-flammability		458 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; 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 Reliabili	ity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
		(Method Objectivity)		towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu-
				sion in a peer- reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain 5. Outer	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
		1104015	1 1/2 1	Rading of and factor is not appreade to this kind of information.
Overall Quality Determination				
`	v		3	

PUBLIC RELEASE DRAFT July 2024 Viscosity

Study Citation: OECD Harmonized	Dreher, E. L., B Viscosity	Dreher, E. L., Beutel, K. K., Myers, J. D., Lübbe, T., Krieger, S., Pottenger, L. H. (2014). Chloroethanes and chloroethylenes. :1-81. Viscosity					
Template:							
HERO ID:	4293766						
	EXTRACTION						
Parameter		Data					
Viscosity		0.38 x 10^-3					
CASRN and Test Material		75-34-3; Not Reported					
Confidentiality, Type, and C	Guideline	None; Experimental; Not reported					
Solvent, Reactivity, Storage	e, and Stability	Not reported; Not reported; Not reported	l; Not reported				
Radiolabel, Source, State, a	and Purity	Not reported; Not reported; Not reported	; Not reported Note	es: Not reported			
Temperature		20°C					
Test Conditions		Not reported					
Standard Deviation Results		Not reported	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 7: Test Paliabil	ity.						
Domain 2. Test Kenabir	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased			
	Mettre 5.	(Method Objectivity)	Wiedium	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.			
			TT• 1				
Overall Quality Determination High							

Study Citation: OECD Harmonized	Elsevier, (2019) Viscosity	Elsevier, (2019). Reaxys: physical-chemical property data for 1,1-dichloroethane. CAS Registry Number: 75-34-3 Viscosity				
HERO ID:	5926414					
			EXTRACTIO	 N		
Parameter		Data				
Viscosity CASRN and Test Material Confidentiality, Type, and C Solvent, Reactivity, Storage Radiolabel, Source, State, a Temperature Test Conditions Standard Deviation Results Results Details	Guideline e, and Stability and Purity	0.465 - 0.49 75-34-3; 1,1-Dichloroethane None; Experimental; Not reported NR; NR; NR; NR NR; NR; NR 20-25°C Not Reported Not Reported At 20-25°C; 5 values were reported in R measured at non-standard temperatures.	eaxys; 4 values we	re reported in the range of 0.465 to 0.49 at 20-25°C; 1 value was outside this range or		
				AT		
Domain		Metric	Rating	Comments		
Domain 1: Substance			6			
	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	Medium	There is no indication that the methodology for producing the information was biased		
	Metric 4:	(Method Objectivity) Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu- sion in a peer-reviewed/recognized database or other secondary source.		
Domain 3: Other						
Domain 5. Oulei	Metric 5:	Databases	High	Data is from a secondary database with a references to the peer-reviewed original source.		
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.		
Overall Qualit	ty Determi	nation	High			

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

Study Citation:	NLM, (2018). P	PubChem: Hazardous Substance Data B	ank: 1,1-Dichloro	ethane, 75-34-3.	
Template.	VISCOSITY				
HERO ID:	5926110				
	0,20110		EVTRACTIO	N	
Parameter		Data	EATRACIIO	1	
Viscosity		0.464			
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			
Temperature		25°C			
Test Conditions		Not Reported			
Standard Deviation Results		Not Reported			
Results Details		0.464 mPa.S			
				A	
Domain		Matria	EVALUATIO	Commonte	
Domain Demain 1: Substance		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	Bating of this factor is not applicable to this kind of information	
	Wiettie 2.	Appropriateness	1.171	Rating of this factor is not applicable to this kind of information.	
Domain 2: Test Reliabil	ity				
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased	
		(Method Objectivity)		towards a particular product or outcome.	
	Metric 4:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's 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, peer-reviewed database that provides references to a recognized data collection.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Quality Determination			High		

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

PUBLIC RELEASE DRAFT July 2024 Viscosity

Study Citation: OECD Harmonized	Rumble, J. R. (2 Viscosity	2018). Viscosity of liquids. :6-234 - 6-2		
Template:	5			
HERO ID:	5932747			
			EXTRACTIO	N
Parameter		Data		
Viscosity		0.464		
CASRN and Test Material	~	75-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and C	Juideline	None; Experimental; Not reported		
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR		
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR		
Temperature		25°C		
Iest Conditions		Not Reported		
Standard Deviation Results		Not Reported $0.262 \text{ aB at } 50^{\circ}\text{C}$		
Results Details		0.302 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 Reliabil	ity			
20114111 21 1000 1001401401	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 2. Other				
Domain 3: Other	Matric 5:	Databases	Uigh	Date is from a near reviewed date collection
	Metric 6:	Models	N/A	Data is from a peer-reviewed data conection.
	mente 0.	11104015	11/7	Kanng of ans factor is not applicable to this kind of information.
Overall Qualit	t y Determi	nation	High	

Study Citation: OECD Harmonized	Dreher, E. L., Beut Refractive Index	el, K. K., Myers, J. D., Lübbe, T., Kriege	r, S., Pottenge	r, L. H. (2014). Chloroethanes and chloroethylenes. :1-81.			
Template: HERO ID:	4293766						
	1273700	F	VTPACTIO	N			
Parameter		Data	AINACIIU				
1 ul ullicitor		Dutu					
Refractive Index		1 4164					
CASRN and Test Material		75-34-3. Not Reported					
Confidentiality Type, and C	Juideline	None: Experimental: None					
Solvent, Reactivity, Storage	and Stability	Not reported: Not reported: Not reported: Not	ot reported				
Radiolabel, Source, State, a	nd Purity	Not reported; Not reported; Not reported; Not	ot reported Note	es: Not reported			
Temperature		20°C	1				
System		Not reported					
Standard Deviation Results		Not reported					
Results Details		Not reported					
Results Details Methods		Not reported					
Parameter		Not reported					
		E	VALUATION	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	Medium	There is no indication that the methodology for producing the information was biased			
	N	(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			
				inclusion in a per-reviewed/recognized database of oner 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 Qualit	y Determina	ation	High				

Study Citation: OECD Harmonized	Elsevier, (2019). Refractive Index	Reaxys: physical-chemical property da	ta for 1,1-dichlor	oethane. CAS Registry Number: 75-34-3
HERO ID:	5926414			
			EXTRACTIO	N
Parameter		Data		-
Refractive Index		1.40572 - 1.42706		
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	nd 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 Rea	axys; 21 values we	re 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 temperatu	res.
Results Details Methods		Not Reported		
Parameter		Not Reported		
			FVALUATIO	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	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				
Domain 5. 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	y Determin	nation	High	

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

Study Citation: OECD Harmonized	NLM, (2018). Pu Refractive Index	bChem: Hazardous Substance Data B	ank: 1,1-Dichloro	ethane, 75-34-3.
Template:	500(110			
HERO ID:	5926110			
			EXTRACTIO	N
Parameter		Data		
Refractive Index		1.4167		
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	nd 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 Reliabili	ity			
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	N	(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
				sion in a peer review carteeoginzed database of 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	y Determin	ation	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

PUBLIC RELEASE DRAFT July 2024 Refractive Index

1,1-Dichloroethane

Study Citation: OECD Harmonized	O'Neil, M. J. (20 Refractive Index	013). Ethylidene chloride. 75-34-3. [1,	I-Dichloroethane]	. :705.
Template:	iteritetive index			
HERO ID:	5926374			
			EXTRACTIO	N
Parameter		Data		
Refractive Index		1.4167		
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	nd 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 Reliabil	ity			
2 sinuin 2. Test Rendon	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	1.100110 01	(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 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, 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	y Determir	nation	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.

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PUBLIC RELEASE DRAFT July 2024 Refractive Index

Study Citation: OECD Harmonized	Rumble, J. R. (2 Refractive Index	2018). 1,1-Dichloroethane. :3-16.		
HERO ID:	5331600			
			EXTRACTIO	N
Parameter		Data		
Refractive Index		1.4164		
CASRN and Test Material	a	/5-34-3; 1,1-Dichloroethane		
Confidentiality, Type, and Guideline		None; Experimental; Not reported		
Solvent, Reactivity, Storage, and Stability		INK; INK; INK; INK ND, ND, ND, ND		
Temperature		1 NK; 1 N		
System		20 C		
System Standard Deviation Results		Not Reported		
Results Details	9	Not Reported		
Results Details Methods		Not Reported		
Parameter		Not Reported		
			EVALUATIO	N
Domain		Metric	Rating	Comments
Domain 1: Substance				
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.
	Metric 2:	Appropriateness	N/A	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabil	ity			
Domain 2. Tost Roman	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:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu- sion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other				
Domain J. Oulei	Metric 5	Databases	High	Data is from a recognized neer-reviewed data collection
	Metric 6	Models	N/A	Rating of this factor is not applicable to this kind of information
	menie 0.	1100015	11/21	rating of any factor is not applicable to any kind of information.
Overall Qualit	ty Determi	nation	High	

Study Citation:	California Office of	f Environmental Health Hazard Asso	essment (OEHHA) (200	3). Public health goals for chemicals in drinking water: 1,1-dichloroethane		
OECD Harmonized	in drinking water. Henry's I aw					
Template:	Hein'y 5 Eaw					
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, Storag	e, and Stability	NA; NA; NA				
Radiolabel, Source, State,	and Purity	NA; NA; NA; NA Notes: NA				
Temperature		NA				
pH		NA				
System		NA				
Standard Deviation Result	s	0.0009				
Results Details		Reported values are mean and standard	l deviation of the values fo	und 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 Relial	bility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.
Domain 3: Other	Metric 5:	Databases	Medium	The data are from a source that is known but is missing elements required for High designation such as peer region public availability or the inclusion of references to
	Metric 6:	Models	N/A	original sources. 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.

Study Citation: OECD Harmonized	Canada,, G.o. (20) Henry's Law	21). Fact sheet: 1,1-dichloroethane.					
Template: HERO ID:	7309759						
			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 C	Guideline	none; not specified; NR					
Solvent, Reactivity, Storage	, and Stability	NR; NR; NR; NR					
Radiolabel, Source, State, a	nd Purity	NR; NR; NR; NR Notes: Rapid volatilizat	ion when dissolv	ed			
Temperature		NR					
pH		NR					
System		NR					
Standard Deviation Results		NR					
Results Details		Reported as 5x10^-3 atm·m3 /mol	orted 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 Reliabili	tv						
	Metric 3:	Reliability/Unbiased	High	There is no indication that the methodology for producing the information was biased			
		(Method Objectivity)	0	towards a particular product or outcome.			
	Metric 4:	Reliability/Analytical Method	Medium	The analytical method is unknown but is likely to be appropriate based on the data's inclusion in a peer-reviewed/recognized database or other secondary source.			
Domain 3: Other							
Domain J. Oulo	Metric 5	Databases	Medium	The data are from a source that is known but is missing elements required for High			
	moule 5.	Dutuotasos	Wieddilli	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	y Determin	ation	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:	Chen, F.,ei, Freed	Chen, F.,ei, Freedman, D. L., Falta, R. W., Murdoch, L. C. (2012). Henry's law constants of chlorinated solvents at elevated temperatures. Chemosphere					
OECD Harmonized	Henry's Law						
HERO ID:	1739466						
			EXTRACTIO	N			
Parameter		Data					
		0.00040 0.0450 / 2/ 1					
Henry's Law		0.00249 - 0.0452 atm-m3/mol					
CASKIN and Test Material		Nana: Experimental: Nat Benertad					
Solvent Beastivity Storeg	Juluellie and Stability	None; Experimental; Not Reported					
Padialabel Source State of	ond Purity	ING, ING, ING ND, TCI, ND, ND					
Temperature	and I unity	8.03°C					
nH		Not Reported					
System		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		8.0°C, 0.00249 atm m3/mol, 17.1 %SD; m3/mol, 3.48%SD; 78.0°C, 0.02370 atm 93.0°C, 0.04523 atm m3/mol, 21.0 %SD)°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 3/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; 3.0°C, 0.04523 atm m3/mol, 21.0 %SD				
Results Details Methods Modified EPICS; water-saturated solutions, shaker table at room temperature overnight before measure GC-FID			t room temperature overnight before measuring the headspace concentrations by GC,				
EVALUATION							
Domain		Metric	Rating	Comments			
Domain 1: Substance							
	Metric 1:	Representativeness	High	Data are measured or estimated for the subject chemical substance.			
	Metric 2:	Appropriateness	High	Measured data are consistent with the subject chemical substance structural features or other physical/chemical properties or behaviors.			

	••••			
Domain 2: Test Reliab	Metric 3:	Reliability/Unbiased	High	The methodology for producing the information is designed to answer a specific ques-
		(Method Objectivity)	0	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 Determination			High	

Study Citation:	Gorgenyi, M., Dewulf, J., Langenhove, Van, H. (2002). Temperature dependence of Henry's law constant in an extended temperature range. Chemosphere							
OECD Harmonized	48(7):757-702. Henry's Law							
Template:	nong s Dun							
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; NR	NR; NR; NR					
Temperature		25°C						
рН		Not reported						
System		EPICS-SPME technique (equilibrium)	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						
Results Details Methods		0.6885 60°C EPICS-SPME technique (equilibrium partitioning in closed systems-solid phase microextraction), units not stated						
			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 Reliabil	ity							
20mmin 2. rest rendom	Metric 3.	Reliability/Unbiased	High	Data reported in a peer-reviewed journal article				
	Metric 5.	(Method Objectivity)	Ingh	Data reported in a peer reviewed journar article.				
	Metric 4:	Reliability/Analytical Method	Medium	The method referred to previous articles; units not stated.				
Domain 3: Other								
Domain J. Outer	Metric 5.	Databases	High	Data is from a recognized neer-reviewed data collection				
	Metric 6	Models	N/A	Rating of this factor is not applicable to this kind of information				
			1 1/2 1					
Overall Quality Determination High								
	v		ð					

Study Citation: OECD Harmonized Template: HERO ID:	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. Henry's Law 5441348				
	EXTRACTION				
Parameter	Data				
Henry's Law	25.6 - MPa				
CASRN and Test Material	75-34-3; 1,1-Dichloroethane	75-34-3; 1,1-Dichloroethane			
Confidentiality, Type, and C	uideline None; Experimental; Non-guideline; Inert Gas Stripping Method	None; Experimental; Non-guideline; Inert Gas Stripping Method			
Solvent, Reactivity, Storage	and Stability NR; NR; NR	NR; NR; NR			
Radiolabel, Source, State, a	d Purity NR; various suppliers; NR; 99 mol % or higher Notes: Analytical	NR; various suppliers; NR; 99 mol % or higher Notes: Analytical or pure grade chemical			
Temperature	293.15 K	293.15 K			
рН	NR	NR			
System	Equilibrium stripping in an all-glass jacketed device with the pre- vigorous mixing for 2-5 hours. Equilibrium cell connected and str	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%	Relative standard errors ~1%			
Results Details	HLC defined as $\lim (x_{1}>0)$ solute fugacity/solute mole fraction = 252.7 atm (15-72.3 MPa at 283.15-323.15), where Kaw = $\lim (c_{1})$	n the liquid solution. Kaw = 191,000 (116-498 at 283.15-323.15 K); 25.6 MPa wl) 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	bility			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	High	The methodology for producing the information is designed to answer a specific ques- tion, 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 analyti- cal method is unknown but 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 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	Henry's Law							
Template:								
HERO ID:	5441348							
		EVALUATION						
Domain	Metric	Rating	Comments					
Overall Quali	ty Determination	High						
Study Citation: OECD Harmonized	NLM, (2018). P Henry's Law	ubChem: Hazardous Substance Data B	ank: 1,1-Dichloro	ethane, 75-34-3.				
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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	Guideline	None; Experimental; Not Reported						
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR						
Radiolabel, Source, State, a	and Purity	NR; NR; NR; NR						
Temperature		24°C						
pH		Not Reported						
System		Not Reported						
Standard Deviation Results		Not Reported						
Results Details		Not Reported						
Results Details Methods		Not Reported						
			FVALUATIO					
Domain		Metric	Rating	Comments				
Domain 1: Substance								
	Metric 1:	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	ity							
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased				
	Matria 4.	(Method Objectivity) Reliability (Analytical Mathad	Madium	towards a particular product or outcome.				
	Metric 4:	Renadinty/Analytical Method	Medium	sion in a peer-reviewed/recognized database or other secondary source.				
Domain 3: Other								
2 children 27. Other	Metric 5	Databases	High	Data is from a publicly available database that provides references to original sources				
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.				
Overall Quality Determination High								

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

Study Citation: OECD Harmonized	RIVM, (2007). Henry's Law	Ecotoxicologically based environmenta	al risk limits for sev	veral volatile aliphatic hydrocarbons. :217.
HERO ID:	5159900			
			EXTRACTIO	N
Parameter		Data		
Henry's Law		569.0 - Pa m3/mol		
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	nd Purity	NR; NR; NR; NR Notes: NR		
Temperature		NR		
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 Reliabili	ity			
Domain 2. Test Rendom	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	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				
Domain 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 and use OR includes references to the original sources.

Overall Quality Determination

Metric 6:

N/A High Rating of this factor is not applicable to this kind of information.

* Related References: Primary Source: Gossett 1987 HERO ID 732584

Models

Study Citation: OECD Harmonized	RIVM, (2007). E Henry's Law	cotoxicologically based environmenta	l risk limits for sev	veral volatile aliphatic hydrocarbons. :217.
HERO ID:	5159900			
			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 C		None; Experimental; Not reported		
Solvent, Reactivity, Storage	, and Stability	NK; NK; NK; NK		
Radiolabel, Source, State, a	nd Purity	NR; NR; NR; NR Notes: NR		
		20 deg C		
рн Svotom		NK ND		
System Standard Daviation Paculta		NR ND		
Paculte Dataile		NK Not Peported		
Results Details Methods		NR		
Results Details Methods		INK		
			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: Tast Baliabili				
Domain 2. Test Kenaom	Metric 3.	Paliability/Upbiased	Medium	There is no indication that the methodology for producing the information was biased
	Methe 5.	(Method Objectivity)	Wiedium	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
		1.0.1.0.1.0.9,7,1.1.0.1,9,1.0.0.1,1.1.0.0.0	2011	used.
Domain 3: Other				
Domain J. Outer	Metric 5.	Databases	High	The information or data is from a recognized data collection/repository where data are
	Wieure 5.	Databases	Ingh	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: Tse et al. 1992 HERO ID 658808

Study Citation: OECD Harmonized	RIVM, (2007). Eo Henry's Law	cotoxicologically based environmental	risk limits for sev	veral volatile aliphatic hydrocarbons. :217.	
HERO ID:	5159900				
			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 C	Juideline	None; Experimental; Not reported			
Solvent, Reactivity, Storage	e, and Stability	NR; NR; NR; NR			
Radiolabel, Source, State, a	nd 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 Reliabili	itv				
_ 5.1.a 2. 1050 Reflation	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 5. Other	Metric 5	Databases	High	The information or data is from a recognized data collection/repository where data are	
	Methe 5.	Databases	Ingn	peer-reviewed by experts in the field, are broadly available to the public for review and use OR includes references to the original sources.	
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.	
Overall Qualit	Overall Quality Determination High				

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

Study Citation: OECD Harmonized	Rumble, J. R. (20 Henry's Law	18). Aqueous solubility and Henry's law	constants of or	ganic compounds. :5-148 - 5-177.		
Template.	Henry S Law					
HERO ID.	5932745					
	5752715					
D (EXTRACTIO	N		
Parameter		Data				
Henry's Law		0.63 kPa m3/mol				
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				
Temperature		25°C				
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				
]	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	ity					
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased		
	34.1.4	(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.		
Overall Qualit	Overall Quality Determination High					

Study Citation: OECD Harmonized	U.S. EPA, (2019 Henry's Law). Chemistry Dashboard Information for	or 1,1-Dichloroeth	ane. 75-34-3
HERO ID:	5926139			
			FYTRACTIO	N
Parameter		Data	EATRACIIO	
Henry's Law		0.00562 atm-m3/mol		
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	nd Purity	NR; NR; NR; NR		
Temperature		24°C		
рН		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	ity	ו יודע אייי ויו ס		
	Metric 3:	Reliability/Unbiased	Medium	There is no indication that the methodology for producing the information was biased
	Matria 4	(Method Objectivity) Reliability/Analytical Mathad	Madium	Analytical method is unknown by is likely to be appropriate based on the date's inclu
	Meure 4.	Kenabinty/Anarytical Method	Medium	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 original sources.
	Metric 6:	Models	N/A	Rating of this factor is not applicable to this kind of information.
Overall Oualit	Overall Quality Determination High			
			8	

* Related References: PhysProp. Gossett, JM. 1987

Study Citation: OECD Harmonized	Elsevier, (2019) Dielectric Const	. Reaxys: physical-chemical property datat	ata for 1,1-dichlor	oethane. CAS Registry Number: 75-34-3			
Template:	500(414						
HERO ID:	5926414						
	EXTRACTION						
Parameter		Data					
CASRN and Test Material		75-34-3; 1.1-Dichloroethane					
Confidentiality, Type, and C	Guideline	None; Experimental; Not Reported					
Solvent, Reactivity, Storage	, and Stability	NR; NR; NR; NR					
Radiolabel, Source, State, a	nd 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 Reaxys; 2 of these values were reported in the range of 9.4 range or measured at unreported or non-standard temperatures.			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 Reliabili	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:	Reliability/Analytical Method	Medium	Analytical method is unknown but is likely to be appropriate based on the data's inclu- sion in a peer-reviewed/recognized database or other secondary source.			
Domain 3: Other							
Domain 5. 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	Overall Quality Determination High						

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

Study Citation: OECD Harmonized	NLM, (2018). P Dielectric Const	PubChem: Hazardous Substance Data B tant	ank: 1,1-Dichloro	ethane, 75-34-3.
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	e, and Stability	NR: NR: NR		
Radiolabel, Source, State, a	nd Purity	NR; NR; NR; NR		
Dielectric Constant	2	10.9		
Temperature		20°C		
System		Not Reported		
Results Value		Not Reported		
Results Details		Not Reported		
D '			EVALUATIO	N C C
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
	Metric 2.	Appropriateness	14/21	Rating of this factor is not applicable to this kind of information.
Domain 2: Test Reliabili	ity			
	Metric 3:	Reliability/Unbiased (Method Objectivity)	Medium	There is no indication that the methodology for producing the information was biased towards a particular product or outcome.
	Metric 4:	Reliability/Analytical Method	Medium	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	M. () 5		TT: 1	
	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.
Overall Qualit	Overall Quality Determination High			

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

Study Citation: OECD Harmonized	Dreher, E. L., Be Other Properties	eutel, K. K., Myers, J. D., Lübbe, T., Krie	eger, S., Pottenge	er, L. H. (2014). Chloroethanes and chloroethylenes. :1-81.	
HERO ID:	4293766				
	EXTRACTION				
Parameter		Data			
CASRN and Test Material		75-34-3; Not Reported			
Confidentiality, Type, and Confidentiality, and	Guideline	None; Experimental; Not reported			
Solvent, Reactivity, Storage	e, and Stability	Not reported; Not reported; Not reported;	Not reported		
Radiolabel, Source, State, a	and Purity	Not reported; Not reported; Not reported;	Not reported Not	es: Not reported	
Results Value		Heat of evaporation at 298 K: 30.8 kJ/mo	1		
Results Details		Not reported			
Results Remarks		Not reported			
				A.	
D '			EVALUATIO	N C C	
Domain		Metric	Rating	Comments	
Domain 1: Substance	Matria 1.	Democratic	II: -l-		
	Metric 1:	Ammonisteness	High	Data are measured or estimated for the subject chemical substance.	
	Metric 2:	Appropriateness	IN/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					
Domain 5. Otion	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 Qualit	Overall Quality Determination High				

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				
$atm \cdot m^3/mol$	Atmospheres - cubic meters per mole				
С	Celsius				
CASRN	Chemical Abstract Service registry number				
cP	Centipoise				
CRC	CRC Handbook of Chemistry and Physics				
DOE	U.S. Department of Energy				
ECB	European Chemicals Bureau				
EPA	Environmental Protection Agency				
F	Fahrenheit				
GC	Gas Chromatography				
g/cm ³	Grams per cubic centimeter				
GLP	Good Laboratory Practice				
HLC	Henry's Law Constant				
HPV	High Production Volume				
HSDB	Hazard Substance Data Bank				
ILO	International Labour Organization				
IPCS	International Programme on Chemical Safety				
IUCLID	International Uniform Chemical Information Database				
К	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; $1 \text{ hPa} = 100 \text{ Pa}$)				
pH	Negative base 10 Log of Hydrogen Ion (H+) Concentration in Aque-				
	ous Solution				
рКа	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)				

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

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			

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