



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878, and
Regulation (EC) No. 1272/2008

Revision Date 05-Sep-2024

Version 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code VC1233B
Product Name 84101 5 MINUTE EPOXY (RESIN)

Other means of identification

EC No (EU Index No) 216-823-5
(603-073-00-2)
CAS No. 1675-54-3
Unique Formula Identifier (UFI) 7VUH-7093-U00K-9RWK

Substance. Contains BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Epoxy resin
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

<u>Manufacturer</u>	<u>Only Representative (OR)</u>
ITW Permatex, Inc. 6875 Parkland Blvd. Solon, Ohio 44139 USA Telephone: 1-87-Permatex (866) 732-9502	ITW Permatex, Inc. Bay 150 Shannon Industrial Estate Co. Clare Ireland V14 DF82 353(61)771500 353(61)471285 customerservice.shannon@itwpp.com

For further information, please contact

Contact Point ITW Permatex, Inc.
6875 Parkland Blvd.
Solon, Ohio 44139 USA
Telephone: 1-87-Permatex
(866) 732-9502

E-mail address: mail@permatex.com

Non-Emergency Telephone Number 866-732-9502

1.4. Emergency telephone number

24-hour emergency phone number EU Member States information as follows:

24-hour emergency phone number - §45 - (EC)1272/2008	
Europe	112
Austria	01 406 43 43
Belgium	070 245 245
Bulgaria	+359 2 9154 233
Croatia	+3851 2348 342
Cyprus	1401
Czech Republic	+420 224 919 293/ +420 224 915 402
Denmark	+ 45 8212 1212
Estonia	16662/ (+372) 7943 794
Finland	0800 147 111/ 09 471 977
France	+33 (0)1 45 42 59 59
Germany	+49 228 192 40
Greece	(003) 2107793777
Hungary	+36 80 201 199
Iceland	543 2222
Ireland	01 809 2166
Italy	0382-24444
Latvia	+371 67042473
Liechtenstein	01 406 43 43
Lithuania	+370 (85) 2362052
Luxembourg	(+352) 8002 5500
Malta	112
Netherlands	+31 (0)88 755 8000
Norway	22 59 13 00
Poland	112
Portugal	+351 800 250 250
Romania	+40213183606
Slovakia	+421 2 5477 4166
Slovenia	112
Spain	+34 91 562 04 20
Sweden	112
Switzerland	145
United Kingdom	111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin irritation	Category 2 - (H315)
Eye irritation	Category 2 - (H319)
Skin sensitization	Category 1 - (H317)

2.2. Label elements

Contains BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE



Signal word

Warning

Hazard statements

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

Precautionary Statements - EU (§28, 1272/2008)

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 - Wash face, hands and any exposed skin thoroughly after handling.

P280 - Wear protective gloves.

P280 - Wear protective gloves and eye/face protection.

P337 + P313 - If eye irritation persists: Get medical advice/attention.

100 % of the mixture consists of ingredient(s) of unknown acute toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

2.3. Other hazards**Other hazards**Contains epoxy constituents with an average molecular weight of ≤ 700 .**PBT & vPvB**

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors.

Chemical name	EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances of Very High Concern (SVHC) for Authorisation	EU - REACH (1907/2006) - Endocrine Disruptor Assessment List of Substances
BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE	-	-

SECTION 3: Composition/information on ingredients**3.1. Substances**

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	Notes
BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE 1675-54-3	80-100%	No data available	216-823-5 (603-073-00-2)	Skin Irrit. 2 (H315) Skin Sens. 1 (H317) Eye Irrit. 2 (H319)	Eye Irrit. 2 :: C \geq 5% Skin Irrit. 2 :: C \geq 5%	-	-	-

Full text of H- and EUH-phrases: see section 16**Acute Toxicity Estimate**

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its

components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE 1675-54-3	11266.1	20000	No data available	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59).

Section 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
Skin contact	May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician. Wash off immediately with soap and plenty of water for at least 15 minutes.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

4.2. Most important symptoms and effects, both acute and delayed

Symptoms	Itching. Rashes. Hives. May cause redness and tearing of the eyes. Burning sensation.
Effects of Exposure	No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians	May cause sensitization in susceptible persons. Treat symptomatically.
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Section 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Small Fire	In case of fire, use water spray, foam, dry chemical, or CO ₂ .
Large Fire	In case of fire, use water spray, foam, dry chemical, or CO ₂ .
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Product is or contains a sensitizer. May cause sensitization by skin contact.

Hazardous combustion products No information available

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

General hygiene considerations Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Packaging materials No information available.

Storage class (TRGS 510) Storage class 10.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

Other Information

No information available.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure Limits**

Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE 1675-54-3	-	-	skin sensitizer	-	-

Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers

Chemical name	Oral	Dermal	Inhalation
BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE 1675-54-3	-	0.75 mg/kg bw/day [4] [6]	4.93 mg/m ³ [4] [6]

Notes

[4] Systemic health effects.
[6] Long term.

Derived No Effect Level (DNEL) - General Public

Chemical name	Oral	Dermal	Inhalation
BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE 1675-54-3	0.5 mg/kg bw/day [4] [6]	-	0.87 mg/m ³ [4] [6]

Notes

[4] Systemic health effects.
[6] Long term.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE 1675-54-3	0.006 mg/L	0.018 mg/L	0.0006 mg/L	0.0018 mg/L	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE 1675-54-3	0.341 mg/kg sediment dw	0.0341 mg/kg sediment dw	10 mg/L	0.0647 mg/kg soil dw	11 mg/kg food

8.2. Exposure controls

Engineering controls	No information available.
Personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles).
Hand protection	Wear suitable gloves. Impervious gloves.
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing.
Respiratory protection	Appropriate respiratory protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
Thermal hazards	No information available.
Other protective equipment	No information available.
Environmental exposure controls	No information available.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Paste / Gel Liquid	
Color	Clear	
Odor	No information available.	
Odor threshold	No information available	
Property	Values	Remarks • Method
Melting point / freezing point	No data available	Estimated
Boiling point / boiling range	> 260 °C	
Flammability (solid, gas)	No data available	Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge. None known
Flammability Limit in Air		
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Flash point	252 °C	Pensky-Martens Closed Cup (PMCC)
Autoignition temperature	No data available	Estimated
Decomposition temperature		Remarks: Self-Accelerating decomposition temperature (SADT): 50 °C SADT-Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction.
pH	No data available	
pH (as aqueous solution)	No data available	None known

Kinematic viscosity	No Data Available	Kinematic viscosity at 100 degrees C
Dynamic viscosity	11,000-14,000 mPa.s @25°C	
Water solubility	No data available	Insoluble in water
Solubility(ies)	No Data Available	None known
Partition coefficient	3.242	
Vapor pressure	0.03 mbar @ 77°C (171°F)	
Relative density	1.16	
Bulk density	No data available	
Density	No data available	
Vapor density	>1	Air = 1
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	

9.2. Other information

VOC content 0

9.2.1. Information with regard to physical hazard classes
Not applicable

9.2.2. Other safety characteristics
No information available

Section 10: Stability and reactivity**10.1. Reactivity**

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Hazardous polymerization No information available.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

Hazardous Decomposition Products None known based on information supplied.

Section 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Information on likely routes of exposure

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.
Skin contact	May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation.
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Acute toxicity	Based on available data, the classification criteria are not met.
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Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral)	11,266.10 mg/kg
ATEmix (dermal)	20,000.00 mg/kg
ATEmix (inhalation-gas)	99,999.00 ppm
ATEmix (inhalation-vapor)	99,999.00 mg/l
ATEmix (inhalation-dust/mist)	99,999.00 mg/l

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE	= 11300 µL/kg (Rat)	= 20000 mg/kg (Rabbit)	-

Skin corrosion/irritation	Classification based on data available for ingredients. Causes skin irritation.
Serious eye damage/eye irritation	Classification based on data available for ingredients. Causes serious eye irritation.
Respiratory or skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.

Teratogenicity	No information available.
STOT - single exposure	Based on available data, the classification criteria are not met.
STOT - repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	Based on available data, the classification criteria are not met.

11.2. Information on other hazards**11.2.1. Endocrine disrupting properties**

Endocrine disrupting properties	Based on available data, the classification criteria are not met.
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11.2.2. Other information

Neurological effects	No information available.
Other adverse effects	No information available.

Section 12: Ecological information**12.1. Toxicity**

Ecotoxicity	The environmental impact of this product has not been fully investigated.
Unknown aquatic toxicity	Contains 0 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence and degradability	No information available.
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12.3. Bioaccumulative potential**Bioaccumulation**

Chemical name	Partition coefficient
BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE	2.33

12.4. Mobility in soil

Mobility in soil	No information available.
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12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment	Based on available data, the classification criteria are not met.
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Chemical name	PBT and vPvB assessment
BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties Based on available data, the classification criteria are not met.

12.7. Other adverse effects

Other adverse effects No information available.

PMT or vPvM properties Based on available data, the classification criteria are not met.

Section 13: Disposal considerations**13.1. Waste treatment methods**

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

Waste codes / waste designations according to EWC / AVV No information available.

Other information No information available.

Section 14: Transport information**IATA**

14.1 UN number or ID number Not regulated
 14.2 UN proper shipping name Not regulated
 14.3 Transport hazard class(es) Not regulated
 14.4 Packing group Not regulated
 14.5 Environmental hazards Not applicable
 14.6 Special precautions for user
 Special Provisions None

IMDG

14.1 UN number or ID number Not regulated
 14.2 UN proper shipping name Not regulated
 14.3 Transport hazard class(es) Not regulated
 14.4 Packing group Not regulated
 14.5 Environmental hazards Not applicable
 14.6 Special precautions for user
 Special Provisions None
 14.7 Maritime transport in bulk according to IMO instruments No information available

RID

14.1 UN number or ID number Not regulated
 14.2 UN proper shipping name Not regulated
 14.3 Transport hazard class(es) Not regulated
 14.4 Packing group Not regulated
 14.5 Environmental hazards Not applicable
 14.6 Special precautions for user
 Special Provisions None

ADR

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADN

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	
Special Provisions	None

Section 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Germany**

Water hazard class (WGK) non-hazardous to water (nwg)

Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) SR 814.018 Not applicable
Storage of Hazardous Material SC 10/12
WPO (GSchV) SR 814.201; WPA (GSchG) SR 814.20 Not applicable

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
BIS[4-(2,3-EPOXYPROPOXY)PHENYL]PROPANE - 1675-54-3	75	-

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories

TSCA Complies

DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECI	Complies
PICCS	Complies
AICS	Complies
NZIoC	Complies
TCSI	Contact supplier for inventory compliance status

Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing Chemicals Inventory
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals
TCSI - Taiwan Chemical Substance Inventory

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

- H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation

Legend

- SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitizers		

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapor	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method

Serious eye damage/eye irritation	Calculation method
Respiratory sensitization	Calculation method
Skin sensitization	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
 European Chemicals Agency (ECHA) (ECHA_API)
 Environmental Protection Agency
 Acute Exposure Guideline Level(s) (AEGl(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 National Institute of Technology and Evaluation (NITE)
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 U.S. National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision Date 05-Sep-2024

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878, and
Regulation (EC) No. 1272/2008

Revision Date 05-Sep-2024

Version 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Code VC1521B
Product Name 84101 5 MINUTE EPOXY (HARDENER)

Other means of identification

Unique Formula Identifier (UFI) SQ1J-N073-P007-8YHY

Mixture. Contains REACTION PRODUCTS OF PENTAERYTHRITOL, PROPOXYLATED AND 1-CHLORO-2,3-EPOXYPROPANE WITH HYDROGEN; 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL; BIS (DIMETHYLAMINOMETHYL) PHENOL

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Epoxy curing agent
Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

ITW Permatex, Inc.
6875 Parkland Blvd.
Solon, Ohio 44139 USA
Telephone: 1-87-Permatex
(866) 732-9502

Only Representative (OR)

ITW Permatex, Inc.
Bay 150
Shannon Industrial Estate
Co. Clare
Ireland
V14 DF82
353(61)771500
353(61)471285
customerservice.shannon@itwpp.com

For further information, please contact

Contact Point ITW Permatex, Inc.
6875 Parkland Blvd.
Solon, Ohio 44139 USA
Telephone: 1-87-Permatex
(866) 732-9502

E-mail address: mail@permatex.com

Non-Emergency Telephone Number 866-732-9502

1.4. Emergency telephone number

24-hour emergency phone number EU Member States information as follows:

24-hour emergency phone number - §45 - (EC)1272/2008
Europe 112

Austria	01 406 43 43
Belgium	070 245 245
Bulgaria	+359 2 9154 233
Croatia	+3851 2348 342
Cyprus	1401
Czech Republic	+420 224 919 293/ +420 224 915 402
Denmark	+ 45 8212 1212
Estonia	16662/ (+372) 7943 794
Finland	0800 147 111/ 09 471 977
France	+33 (0)1 45 42 59 59
Germany	+49 228 192 40
Greece	(003) 2107793777
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Iceland	543 2222
Ireland	01 809 2166
Italy	0382-24444
Latvia	+371 67042473
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Luxembourg	(+352) 8002 5500
Malta	112
Netherlands	+31 (0)88 755 8000
Norway	22 59 13 00
Poland	112
Portugal	+351 800 250 250
Romania	+40213183606
Slovakia	+421 2 5477 4166
Slovenia	112
Spain	+34 91 562 04 20
Sweden	112
Switzerland	145
United Kingdom	111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Dermal	Category 4 - (H312)
Skin irritation	Category 2 - (H315)
Serious eye damage	Category 1 - (H318)
Skin sensitization	Category 1 - (H317)

2.2. Label elements

Contains REACTION PRODUCTS OF PENTAERYTHRITOL, PROPOXYLATED AND 1-CHLORO-2,3-EPOXYPROPANE WITH HYDROGEN; 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL; BIS (DIMETHYLAMINOMETHYL) PHENOL



Signal word

Danger

Hazard statements

H302 - Harmful if swallowed.
 H312 - Harmful in contact with skin.
 H315 - Causes skin irritation.
 H317 - May cause an allergic skin reaction.
 H318 - Causes serious eye damage.

Precautionary Statements - EU (§28, 1272/2008)

P264 - Wash face, hands and any exposed skin thoroughly after handling.
 P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310 - Immediately call a POISON CENTER or doctor.
 P501 - Dispose of contents/ container to an approved waste disposal plant.

Unknown acute toxicity

100 % of the mixture consists of ingredient(s) of unknown acute toxicity.
 92.5 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
 92.5 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

Additional information

This product requires tactile warnings if supplied to the general public.

2.3. Other hazards

Other hazards No information available.

PBT & vPvB The components in this formulation do not meet the criteria for classification as PBT or vPvB.

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	Notes
REACTION PRODUCTS OF PENTAERYTHRITOL, PROPOXYLATED AND 1-CHLORO-2,3-EPOXYPROPANE WITH	80-100%	No data available	701-196-7	No data available	-	-	-	-

HYDROGEN 72244-98-5								
2,4,6-TRIS(DIMETHYL LAMINOMETHYL)PH ENOL 90-72-2	5-10%	No data available	202-013-9 (603-069-00-0)	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	-	-	-	-
BIS (DIMETHYLAMINOM ETHYL) PHENOL 71074-89-0	1-5%	No data available	275-162-0	No data available	-	-	-	-

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - gas - ppm
2,4,6-TRIS(DIMETHYLA MINOMETHYL)PHENOL 90-72-2	1200	1280	No data available	No data available	No data available

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59).

Section 4: First aid measures

4.1. Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.
Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur.
Eye contact	Get immediate medical attention. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. May cause an allergic skin reaction. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Wear personal protective clothing (see section 8). Avoid contact with skin, eyes or clothing.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms	Burning sensation. Itching. Rashes. Hives.
Effects of Exposure	No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians May cause sensitization in susceptible persons. Treat symptomatically.

Section 5: Firefighting measures**5.1. Extinguishing media**

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Small Fire

In case of fire, use water spray, foam, dry chemical, or CO₂.

Large Fire

In case of fire, use water spray, foam, dry chemical, or CO₂.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Product is or contains a sensitizer. May cause sensitization by skin contact.

Hazardous combustion products No information available

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Section 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. In case of insufficient ventilation, wear suitable respiratory equipment. Take off contaminated clothing and wash before reuse.
General hygiene considerations	Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.
Packaging materials	No information available.
Storage class (TRGS 510)	Storage class 10.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Exposure Limits	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
Biological occupational exposure limits	This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) - Workers No information available

Derived No Effect Level (DNEL) - General Public No information available.

Predicted No Effect Concentration (PNEC)

Chemical name	Freshwater	Freshwater (intermittent release)	Marine water	Marine water (intermittent release)	Air
2,4,6-TRIS(DIMETHYLAMINO)PHENOL 90-72-2	0.084 mg/L	0.84 mg/L	0.0084 mg/L	-	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
2,4,6-TRIS(DIMETHYLAMINO)PHENOL	-	-	0.2 mg/L	-	-

Chemical name	Freshwater sediment	Marine sediment	Sewage treatment	Soil	Food chain
90-72-2					

8.2. Exposure controls

Engineering controls	No information available.
Personal protective equipment	
Eye/face protection	Tight sealing safety goggles.
Hand protection	Wear suitable gloves. Impervious gloves.
Skin and body protection	Wear suitable protective clothing. Long sleeved clothing.
Respiratory protection	Appropriate respiratory protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
Thermal hazards	No information available.
Other protective equipment	No information available.
Environmental exposure controls	No information available.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Color	Clear
Odor	No information available.
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	No data available	Estimated
Boiling point / boiling range	No data available	Polymerization
Flammability (solid, gas)	No data available	Flammable in the presence of the following materials or conditions: open flames, sparks and static discharge. None known
Flammability Limit in Air		
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Flash point	> 95 °C	Pensky-Martens Closed Cup (PMCC)
Autoignition temperature	No data available	Estimated
Decomposition temperature		Remarks: Self-Accelerating decomposition temperature (SADT): 50 °C SADT-Self Accelerating Decomposition Temperature. Lowest temperature at which the tested package size will undergo a self-accelerating decomposition reaction.
pH	No data available	10% in deionized water
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	No Data Available	Kinematic viscosity at 100 degrees C
Dynamic viscosity	1000-1600 mPas (@ 20°C)	
Water solubility	No data available	Insoluble in water

Solubility(ies)	No Data Available	None known
Partition coefficient	No Data Available	None known
Vapor pressure	No Data Available	mmHg
Relative density	1.13	
Bulk density	No data available	
Density	No data available	
Vapor density	No data available	Air = 1
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	

9.2. Other information

VOC content 0

9.2.1. Information with regard to physical hazard classes
Not applicable

9.2.2. Other safety characteristics
No information available

Section 10: Stability and reactivity**10.1. Reactivity**

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Hazardous polymerization No information available.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidizing agents.

10.6. Hazardous decomposition products

Hazardous Decomposition Products None known based on information supplied.

Section 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Information on likely routes of exposure**

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye damage. May cause irreversible damage to eyes.
Skin contact	Specific test data for the substance or mixture is not available. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation.
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Redness. Burning. May cause blindness. Itching. Rashes. Hives. May cause redness and tearing of the eyes.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Acute toxicity	Harmful if swallowed. Harmful by skin contact.
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Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral)	1,200.00 mg/kg
ATEmix (dermal)	1,280.00 mg/kg
ATEmix (inhalation-gas)	99,999.00 ppm
ATEmix (inhalation-vapor)	99,999.00 mg/l
ATEmix (inhalation-dust/mist)	99,999.00 mg/l

Unknown acute toxicity

- 92.5 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
- 92.5 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
- 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
- 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).
- 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Oral LD50	10909.1 mg/kg
Dermal LD50	11636.4 mg/kg

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	= 1200 mg/kg (Rat)	= 1280 mg/kg (Rat)	-

Skin corrosion/irritation	Classification based on data available for ingredients. Causes skin irritation.
Serious eye damage/eye irritation	Classification based on data available for ingredients. Causes burns. Causes serious eye damage.
Respiratory or skin sensitization	May cause an allergic skin reaction.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT - single exposure Based on available data, the classification criteria are not met.

STOT - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties Based on available data, the classification criteria are not met.

11.2.2. Other information

Other adverse effects No information available.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity The environmental impact of this product has not been fully investigated.

Unknown aquatic toxicity Contains 0 % of components with unknown hazards to the aquatic environment.

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation No information available.

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment Based on available data, the classification criteria are not met.

Chemical name	PBT and vPvB assessment
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties Based on available data, the classification criteria are not met.

12.7. Other adverse effects

Other adverse effects No information available.

PMT or vPvM properties Based on available data, the classification criteria are not met.

Section 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

Waste codes / waste designations according to EWC / AVV No information available.

Other information No information available.

Section 14: Transport information

IATA

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

IMDG

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	No information available

RID

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADR

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated

14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

ADN

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special precautions for user	
Special Provisions	None

Section 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations****Germany**

Water hazard class (WGK) slightly hazardous to water (WGK 1)

Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) SR 814.018 Not applicable
Storage of Hazardous Material SC 8
WPO (GSchV) SR 814.201; WPA (GSchG) SR 814.20 Class B

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL - 90-72-2	75	-

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Does not comply

ENCS	Does not comply
IECSC	Complies
KECI	Complies
PICCS	Complies
AICS	Complies
NZIoC	Complies
TCSI	Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing Chemicals Inventory
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals
TCSI - Taiwan Chemical Substance Inventory

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information**Key or legend to abbreviations and acronyms used in the safety data sheet****Full text of H-Statements referred to under section 3**

H302 - Harmful if swallowed
H315 - Causes skin irritation
H319 - Causes serious eye irritation

Legend

SVHC: Substances of Very High Concern for Authorization:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances
STOT: Specific Target Organ Toxicity
ATE: Acute Toxicity Estimate
LC50: 50% Lethal Concentration
LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
+	Sensitizers		

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapor	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitization	Calculation method

Skin sensitization	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
 European Chemicals Agency (ECHA) (ECHA_API)
 Environmental Protection Agency
 Acute Exposure Guideline Level(s) (AEGl(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 National Institute of Technology and Evaluation (NITE)
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 U.S. National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 World Health Organization

Revision Date 05-Sep-2024

Further information No information available

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet