



# SAFETY DATA SHEET

Version: 1.1 Revision date: 17<sup>th</sup> June 2020  
ACCORDING TO OSHA HCS (29 CFR 1910.1200)

## S1009 Adhesive - Part B

### SECTION 1: IDENTIFICATION

<b>Product identifier</b> Product Name	S1009 Adhesive – Part B	
<b>Other Means of Identification</b> Product type	None Mixture	
<b>Recommended use and restrictions</b> Identified Use(s) Uses Advised Against	Adhesive. Epoxy Resin: Hardener None known.	
<b>Details of the supplier of the safety data sheet</b> Address of Supplier	TE Connectivity Corporation Aerospace, Defense & Marine 6900 Paseo Padre Parkway Fremont, CA 94555 USA	
Telephone E-Mail (competent person)	North America: 1-650-361-7000 msdsmaterialsuk@te.com	
<b>Emergency telephone number</b> Emergency Phone No.	US: CHEMTREC 1-800-424-9300 CN: CHEMTREC 1-800-424-9300 Outside North America: 1-703-527-3887 (Collect calls accepted)	Operational 24 hours, 7 days
Languages spoken	English	

### SECTION 2: HAZARDS IDENTIFICATION

**Classification of the substance or mixture in accordance with paragraph (d) of 29 CFR 1910.1200**

**Physical hazards**

Health hazards

Not classified  
Skin Corrosion/Irritation, Category 1A  
Skin Sensitisation, Category 1  
Eye Damage, Category 1  
Reproductive toxicity, Category 2  
Specific target organ toxicity — repeated exposure, Category 2

**Label elements**

**Product Name**

**Contains:**

S1009 Adhesive – Part B  
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether; 2-piperazin-1-ylethylamine; Fatty acids, C-18-unsatd., dimers, reaction products with polyethylenepolyamines

Hazard Symbol



Signal Word(s)

Hazard Statement(s)

Danger  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.  
Suspected of damaging fertility or the unborn child.  
May cause damage to organs through prolonged or repeated exposure.  
Harmful to aquatic life with long lasting effects.



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Precautionary Statement(s)

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe mist/vapours/spray.  
Wash hands and exposed skin thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Contaminated work clothing should not be allowed out of the workplace.

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER/doctor.  
IF exposed or concerned: Get medical advice/attention.

Store locked up.  
Dispose of contents in accordance with local, state or national legislation.

### Other hazards

Environmental hazards

Hazardous to the aquatic environment, Chronic, Category 3; Harmful to aquatic life with long lasting effects. Avoid release to the environment.

Percent of the mixture consists of ingredient(s) of unknown acute toxicity:

0% of the mixture consists of ingredients of unknown acute oral toxicity.  
0% of the mixture consists of ingredients of unknown acute dermal toxicity.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### Substances

Not applicable

Mixtures Substances in preparations / mixtures.

Chemical Name	CAS No.	Concentration (%W/W)	Common name(s), synonym(s) of the substance	Hazard classification
Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether	72244-98-5	50 - 100	epoxy resin (number average molecular weight ≤ 700); reaction product: bisphenol-A-(epichlorhydrin); Reaction product: bisphenol-A-(epichlorhydrin),epoxy resin (number average molecular weight ≤ 700)	Skin corrosion/irritation, Category 2 Skin Sensitisation, Category 1 Eye Irritation, Category 2 Hazardous to the aquatic environment, Chronic, Category 2
2-piperazin-1-ylethylamine	140-31-8	5 - 10	1-(2-Aminoethyl) piperazine; 1-Piperazineethanamine(AEP)	Acute toxicity, Category 4 - Oral Acute toxicity, Category 3 - Dermal Skin Corrosion/Irritation, Category 1B Eye Damage, Category 1 Skin Sensitisation, Category 1 Reproductive toxicity, Category 2 Specific target organ toxicity — repeated exposure, Category 1 Hazardous to the aquatic environment, Chronic, Category 3
Fatty acids, C-18-unsatd., dimers, reaction products with polyethylenepolyamines	68410-23-1	<3	Amines, polyethylenepoly-, reaction products with C18-unsatd. fatty acid dimers; Fatty Acid Polyamide Resin	Skin Corrosion/Irritation, Category 2 Eye Damage, Category 1 Skin Sensitisation, Category 1A Hazardous to the aquatic environment, Chronic, Category 2



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Triethylene tetramine	112-24-3	0.1 - <1	3,6-diazaoctanethylenediamin; Trientine; 1,2 Ethanediamine, N,N'-Bis(2-aminoethyl)-	Acute toxicity, Category 4 - Dermal Skin Corrosion/Irritation, Category 1B Skin Sensitisation, Category 1 Hazardous to the aquatic environment, Chronic, Category 3
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Notes: For full text of H phrases see section 16.

### SECTION 4: FIRST AID MEASURES



#### Description of first aid measures

Self-protection of the first aider

No action should be taken involving personal risk. Wear appropriate personal protective equipment, avoid direct contact. Remove contaminated clothing immediately. If unconscious, place in recovery position and get medical attention immediately. Apply artificial respiration if necessary. Check the vital functions. Keep cool.

Inhalation

IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. IF exposed or concerned: Get medical advice/attention.

Skin Contact

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Obtain immediate medical attention.

Eye Contact

IF IN EYES: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Treatment by an ophthalmologist due to possible caustic burn of the eyes may be required.

Ingestion

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Obtain immediate medical attention.

#### Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage. May cause an allergic skin reaction. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

#### Indication of any immediate medical attention and special treatment needed

Treat symptomatically. No antidotes known.

#### Notes to a physician:

IF IN EYES: Treatment by an ophthalmologist due to possible caustic burn of the eyes may be required.

Following severe exposure the patient should be kept under medical review for at least 48 hours.

### SECTION 5: FIREFIGHTING MEASURES

#### Extinguishing media

Suitable Extinguishing media

Combustible. Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions. Water spray, foam, dry powder or CO<sub>2</sub>.

Unsuitable extinguishing media

Do not use water jet. Direct water jet may spread the fire.

#### Special hazards arising from the substance or mixture

May give off noxious and toxic fumes in a fire. Combustion products: Carbon monoxide, Carbon dioxide, Oxides of nitrogen.

#### Special protective equipment and precautions for fire fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Chemical protection suit. Keep containers cool by spraying with water if exposed to fire. Evacuate if necessary. Do not allow run-off from fire fighting to enter drains or water courses.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

No action should be taken involving personal risk. Wear appropriate personal protective equipment, avoid direct contact. Remove contaminated clothing and wash all affected areas with plenty of water.



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### Environmental precautions

Do not allow to enter drains, sewers or watercourses. Spillages or uncontrolled discharges into soil must be alerted to the appropriate regulatory body.

### Methods and material for containment and cleaning up

Contain spillages. Cover spills with inert absorbent material. Recover the product where possible. Ventilate the area and wash spill site after material pick-up is complete.

## SECTION 7: HANDLING AND STORAGE

### Precautions for safe handling

When using do not eat or drink. Provide adequate ventilation when using the material and follow the principles of good occupational hygiene to control personal exposures. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not eat, drink or smoke when using this product. Avoid all contact. Remove contaminated clothing and wash clothing before reuse. Keep only in original packaging. Keep in a well ventilated place. Keep container closed.

### Conditions for safe storage, including any incompatibilities

Storage temperature

Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources.

Storage life

Stable at ambient temperatures.

Incompatible materials

Keep away from oxidising substances. Avoid contact with acids and alkalis.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Occupational Exposure Limits

No Occupational Exposure Limit assigned.

No OSHA permissible exposure limit (PEL).

No American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV)

#### Biological limit value

Not established

#### Exposure controls

##### Appropriate engineering controls

Provide adequate ventilation when using the material and follow the principles of good occupational hygiene to control personal exposures. Take action to prevent static discharges. Keep away from fire, sparks and heated surfaces.

#### Personal protection equipment

Use personal protective equipment as required. Take care for general good hygiene and housekeeping. Avoid all contact. Avoid inhalation of vapours that may be evolved at elevated temperatures.

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Eye/ face protection



Wear eye protection with side protection (EN166). Eyewash bottles should be available.

Skin protection (Hand protection/ Other)



#### Hand protection

Wear impervious gloves (EN374). Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374. Nitrile rubber (0.4 mm), Polychloroprene - CR (0.5 mm), Butyl rubber (0.7 mm).

**Body protection** Wear impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Recommended: EN 14387 Type A-P2



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### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

#### Information on basic physical and chemical properties

Appearance	Viscous tan liquid
Odour	Mercaptan odor
Odour threshold	Not available
pH	4
Melting point/freezing point	Not determined
Initial boiling point and boiling range	> 260 °C
Flash point	Not determined
Evaporation rate	Not determined
Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	Not applicable
Vapour pressure	Not determined
Vapour density	Not determined
Relative density	1.15
Solubility(ies)	Water: Insoluble
Partition coefficient: n-octanol/water	Not determined
Auto-ignition temperature	Not determined
Decomposition Temperature	Not determined
Viscosity (mPa. s)	Not determined

#### Other information

Explosive properties	Not explosive
Oxidising properties	Not oxidising

### SECTION 10: STABILITY AND REACTIVITY

<b>Reactivity</b>	Stable under normal conditions.
<b>Chemical stability</b>	Stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerisation will not occur.
<b>Conditions to avoid</b>	Avoid prolonged storage at elevated temperature.
<b>Incompatible materials</b>	Keep away from oxidising substances. Avoid contact with acids and alkalis.
<b>Hazardous decomposition product(s)</b>	Combustion products: Carbon monoxide, Carbon dioxide, Oxides of nitrogen

### SECTION 11: TOXICOLOGICAL INFORMATION

#### Information on toxicological effects

<b>Acute toxicity - Oral</b>	Mixture: Based upon the available data, the classification criteria are not met. Calculated acute toxicity estimate (ATE) >2,000 mg/kg. Not classified - No data
Poly[oxy(methyl-1,2-ethanediy)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether 2-piperazin-1-ylethylamine	Acute Tox. 4; H302 EU Harmonised Classification Not classified LD50 (oral,rat) mg/kg: >2000 (OECD 423)
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids	Acute Tox. 4; H302: Harmful if swallowed. EU Harmonised Classification No data
Triethylenetetramine	Mixture: Based upon the available data, the classification criteria are not met. Calculated acute toxicity estimate (ATE) >2,000 mg/kg.
<b>Acute toxicity - Dermal</b>	



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Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether 2-piperazin-1-ylethylamine	Not classified - No data
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids	Acute Tox. 4; H312 EU Harmonised Classification LD50 (skin,rabbit) mg/kg: 866 (Unnamed, 1956)
Triethylenetetramine	Not classified LD50 > 2000 mg/kg bw/day (rat) OECD 402
<b>Acute toxicity - Inhalation</b>	Acute Tox. 4; H312: Harmful in contact with skin. EU Harmonised Classification No data
Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether 2-piperazin-1-ylethylamine	Mixture: Based upon the available data, the classification criteria are not met. Calculated acute toxicity estimate (ATE) > 5 mg/l Not classified - No data
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids	Not classified - No data
Triethylenetetramine	Not classified No data
<b>Skin corrosion/irritation</b>	Not classified No data
Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether 2-piperazin-1-ylethylamine	Mixture: Skin Corr. 1; H314: Causes severe skin burns and eye damage. Not classified - No data
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids	Skin Corr. 1B; H314 EU Harmonised Classification Corrosive to skin. (rabbit) (Unnamed, 1958)
Triethylenetetramine	Skin Irrit. 2; H315 Irritating to skin. (in vitro) (OECD 439)
<b>Serious eye damage/irritation</b>	Skin Corr. 1; H314 EU Harmonised Classification No data
Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether 2-piperazin-1-ylethylamine	Mixture: Eye Dam. 1; H318: Causes serious eye damage. Not classified - No data
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids	Eye Dam. 1; H318 Corrosive to eyes. (rabbit) (Unnamed, 1958)
Triethylenetetramine	Eye Dam. 1; H318 Severely irritating to eyes. (rabbit) (OECD 405)
<b>Respiratory or skin sensitization</b>	Skin Corr. 1; H314 EU Harmonised Classification No data
Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether 2-piperazin-1-ylethylamine	Mixture: Skin Sens. 1; H317: May cause an allergic skin reaction. Skin Sens. 1B; H317 No data
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids	Skin Sens. 1; H317 EU Harmonised Classification Sensitisation (guinea pig) - Positive (OECD 406)
Triethylenetetramine	Skin Sens. 1; H317 Sensitisation (mouse): Positive (OECD 429)
<b>Germ cell mutagenicity</b>	Skin Sens. 1; H317 EU Harmonised Classification No data
Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether 2-piperazin-1-ylethylamine	Mixture: Based upon the available data, the classification criteria are not met. Not classified - No data
	Not classified
	In vitro: Negative (OECD 471)
	In vivo: Negative (mouse) (Unnamed, 1987)



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Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids

Not classified  
In vitro: Negative (OECD 487)  
In vivo: No data

Triethylenetetramine

Not classified  
In vitro: No data  
In vivo: No data

### Carcinogenicity

Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether 2-piperazin-1-ylethylamine

Mixture: Based upon the available data, the classification criteria are not met.  
Not classified - No data

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids

Not classified - No data  
Not classified  
No data

Triethylenetetramine

Not classified  
No data

### Reproductive toxicity

Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether 2-piperazin-1-ylethylamine

Mixture: Repr. 2; Suspected of damaging fertility or the unborn child.  
Not classified - No data

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids

Repr. 2; H361  
Reproductive toxicity: No adverse effect observed (rat) (OECD 422)  
Developmental toxicity: NOEL 75 mg/kg bw/day Developmental impairment (rabbit) (OECD 414)  
Not classified  
Reproductive toxicity: NOAEL (rat) mg/kg bw/day 1000. No effects observed (OECD 422)

Triethylenetetramine

Developmental Toxicity: No data  
Not classified  
Reproductive toxicity: No effects observed (rat) (OECD 422)  
Developmental Toxicity: No data

### STOT - single exposure

Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether 2-piperazin-1-ylethylamine

Mixture: Based upon the available data, the classification criteria are not met.  
Not classified - No data

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids

Not classified - No data  
Not classified  
No data

Triethylenetetramine

Not classified  
No data

### STOT - repeated exposure

Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether 2-piperazin-1-ylethylamine

Mixture: STOT RE 2; May cause damage to organs through prolonged or repeated exposure.  
Not classified - No data

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids

STOT RE 1; H372  
Oral: NOAEL 2000ppm (rat) (OECD 422)  
Inhalation: NOEC 53.5 mg/m<sup>3</sup> (rat) (OECD 413)  
Dermal: NOEL >1000 mg/kg bw/day No adverse effect observed (rat) (OECD 410)

Triethylenetetramine

Not classified  
Oral: NOAEL (rat) mg/kg bw/day 1000 (OECD 422)  
Inhalation: No data  
Dermal: [Click or tap here to enter text.](#)No data  
Not classified  
Oral: No data  
Inhalation: No data  
Dermal: [Click or tap here to enter text.](#)No data



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### Aspiration hazard

Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether 2-piperazin-1-ylethylamine  
Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids  
Triethylenetetramine

Mixture: Based upon the available data, the classification criteria are not met.  
Not classified - No data

Not classified - No data  
Not classified  
No data  
Not classified  
No data

### Information on likely routes of exposure

Inhalation  
Ingestion  
Skin Contact  
Eye Contact

Unlikely – accidental exposure  
Unlikely – accidental exposure  
Possible – accidental exposure  
Unlikely – accidental exposure

### Early onset symptoms related to exposure

Causes severe skin burns and eye damage. May cause an allergic skin reaction.

### Delayed health effects from exposure

Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure.

### Other information

NTP Report on Carcinogens  
IARC Monographs  
OSHA Designated Carcinogen  
NIOSH Occupational Carcinogen List

All chemicals are not listed  
All chemicals are not listed  
All chemicals are not listed  
All chemicals are not listed

## SECTION 12: ECOLOGICAL INFORMATION

### Toxicity

Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether 2-piperazin-1-ylethylamine

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids

Triethylenetetramine

Mixture: Aquatic Chronic 3; H412: Harmful to aquatic life with long lasting effects.  
Aquatic Chronic 3; H412: Harmful to aquatic life with long lasting effects.  
No data

Aquatic Chronic 3; H412 EU Harmonised Classification  
Short term: Not classified LC50 (fish) mg/l 2190 (Unnamed, 1986)  
Long Term: No data

Aquatic Chronic 2; H411  
Acute Toxicity: LC50 (fish) mg/l 7.07 (96 hour) (OECD 203)  
Chronic Toxicity: No data

Aquatic Chronic 3; H412 EU Harmonised Classification  
Acute Toxicity: No data  
Chronic Toxicity: No data

The product is likely to persist in the environment.  
No data

### Persistence and degradability

Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether 2-piperazin-1-ylethylamine

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids

Triethylenetetramine

Little or no biodegradation has been observed (OECD 301F)  
Inherently biodegradable, not fulfilling criteria. EU ECHA registration dossier

No data.

### Bioaccumulative potential

Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether 2-piperazin-1-ylethylamine

The product has low potential for bioaccumulation.  
No data

The substance has low potential for bioaccumulation.  
BCF < 3.9 L/kg  
Log Kow -1.48





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Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids

Triethylenetetramine

### Mobility in soil

Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether 2-piperazin-1-ylethylamine

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids

Triethylenetetramine

### Results of PBT and vPvB assessment

Poly[oxy(methyl-1,2-ethanediyl)],.alpha.-hydro-.omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether 2-piperazin-1-ylethylamine

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids

Triethylenetetramine

### Other adverse effects

Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids and

Triethylenetetramine:

Bioconcentration factor (BCF) : 77.4 The substance has high potential for bioaccumulation. ECHA registration dossier

BCF = 2.0 - The substance has low potential for bioaccumulation. EU ECHA registration dossier

The product is predicted to have low mobility in soil.

No data

The substance is predicted to have low mobility in soil. EU ECHA registration dossier

No data.

No data.

No data for the mixture as a whole.

No data

Not classified as PBT or vPvB. EU ECHA registration dossier

Not classified as PBT or vPvB.

No data.

Regulation (EC) N° 2037/2000 on substances that deplete the ozone layer: No components of the mixture are listed

Regulation (EC) No 517/2014: No components of the mixture are listed

This chemical has properties and characteristics associated with chemicals detected in ground water.

## SECTION 13: DISPOSAL CONSIDERATIONS

### Waste treatment methods

Dispose of wastes in an approved waste disposal facility. Recover or recycle if possible.

## SECTION 14: TRANSPORT INFORMATION

	Road/Rail (ADR/RID)	Sea transport (IMDG)	Air (ICAO/IATA)
<b>UN number</b>	UN 1760	UN 1760	UN 1760
<b>UN proper shipping name</b>	CORROSIVE LIQUID, N.O.S (2-piperazin-1-ylethylamine)	CORROSIVE LIQUID, N.O.S (2-piperazin-1-ylethylamine)	CORROSIVE LIQUID, N.O.S (2-piperazin-1-ylethylamine)
<b>Transport hazard class(es)</b>	8	8	8
<b>Hazard Identification Number</b>	80	Not applicable	Not applicable
<b>Classification code:</b>	C9	Not applicable	Not applicable
<b>Packing group</b>	III	III	III
<b>Environmental hazards</b>	Not classified	Not classified as a Marine Pollutant.	Not classified
<b>Special precautions for user</b>			
Special Provisions	274, 335, 601	274, 335	A97, A158
Limited Quantities	30kg	30kg	30kg
Excepted Quantities	Unknown	Unknown	Not applicable
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable		
<b>Additional Information</b>	None known		



# SAFETY DATA SHEET

Version: 1.1 Revision date: 17<sup>th</sup> June 2020  
ACCORDING TO OSHA HCS (29 CFR 1910.1200)

## S1009 Adhesive - Part B

### SECTION 15: REGULATORY INFORMATION

#### Safety, health and environmental regulations/legislation specific for the substance or mixture

##### US Federal Regulations

TSCA Inventory	All chemicals are not listed
TSCA Inventory Notification (Active-Inactive) Rule	All chemicals are not listed
TSCA Chemical Data Reporting (CDR) Rule	All chemicals are not listed

##### US State Regulations

**Proposition 65 (California)** All chemicals are not listed

##### EU regulations

Wassergefährdungsklasse (Germany)	Water hazard class: 1 (Self classification)
Volatile Organic Compound Content (%):	0%

### SECTION 16: OTHER INFORMATION

**The following sections contain revisions or new statements:** New format has been issued, all sections have been updated to include new information. Review SDS with care.

Section 1 – Updated 'Details of the supplier of the safety data sheet' and Emergency Information.

<b>Version</b>	1.1
<b>Revision Date</b>	17 <sup>th</sup> June 2020
<b>Date Previous Issue:</b>	21-August-2018

#### References:

Existing Safety Data Sheet (SDS). Existing ECHA registration(s) for Fatty acids, C18-unsatd., dimers, oligomeric reaction products with tall-oil fatty acids (CAS No. 68082-29-1); 2-piperazin-1-ylethylamine (CAS No. 140-31-8). EU EU Harmonised Classification(s) for 2-piperazin-1-ylethylamine (CAS No. 140-31-8); Triethylenetetramine (CAS No. 112-24-3). EU classification and labelling inventory Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro.-omega.-hydroxy-, ether with 2,2-bis(hydroxymethyl)-1,3-propanediol (4:1), 2-hydroxy-3-mercaptopropyl ether (CAS No. 72244-98-5).

Classification of the substance or mixture	Classification Procedure
Skin Corrosion/Irritation, Category 1A	Threshold Calculation
Skin Sensitisation, Category 1	Threshold Calculation
Eye Damage, Category 1	Threshold Calculation
Reproductive toxicity, Category 2	Threshold Calculation
Specific target organ toxicity — repeated exposure, Category 2	Threshold Calculation
Hazardous to the aquatic environment, Chronic, Category 3	Summation Calculation

#### LEGEND

ADR/RID	ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road / RID: Regulations concerning the international railway transport of dangerous goods
BCF	Bioconcentration factor (BCF)
CAS	CAS: Chemical Abstracts Service
DNEL	Derived No Effect Level
EC	EC: European Community
EU	European Union
IATA	IATA: International Air Transport Association
ICAO/IATA	ICAO: International Civil Aviation Organization / IATA: International Air Transport Association
IMDG	IMDG: International Maritime Dangerous Goods
LTEL	Long Term Exposure Limit
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Cooperation and Development



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PBT PBT: Persistent, Bioaccumulative and Toxic  
PNEC Predicted No Effect Concentration  
STEL Short Term Exposure Limit  
UN United Nations  
vPvB vPvT: very Persistent and very Toxic

### Hazard classification / Classification code:

Acute Tox. 4; Acute toxicity, Category 4  
Acute Tox. 3; Acute toxicity, Category 3  
Acute Tox. 4; Acute toxicity, Category 4  
Skin Corr. 1A/B/C ; Skin corrosion/irritation, Category 1A/B/C  
Skin Irrit. 2; Skin corrosion/irritation, Category 2  
Skin Sens. 1; Skin Sensitisation, Category 1  
Skin Sens. 1A; Skin Sensitisation, Category 1A  
Skin Sens. 1B; Skin Sensitisation, Category 1B  
Eye Dam. 1; Eye damage, category 1  
STOT SE 3; Specific target organ toxicity — single exposure, Category 3  
  
Repr. 2; Reproductive toxicity, Category 2  
STOT RE 1; Specific target organ toxicity — repeated exposure, Category 1  
STOT RE 2; Specific target organ toxicity — repeated exposure, Category 2  
Aquatic Chronic 2; Hazardous to the aquatic environment, Chronic , Category 2  
Aquatic Chronic 3; Hazardous to the aquatic environment, Chronic , Category 3

### Hazard Statement(s)

H302: Harmful if swallowed.  
H311: Toxic in contact with skin.  
H312: Harmful in contact with skin.  
H314: Causes severe skin burns and eye damage.  
H315: Causes skin irritation.  
H317: May cause an allergic skin reaction.  
H317: May cause an allergic skin reaction.  
H317: May cause an allergic skin reaction.  
H318: Causes serious eye damage.  
H335: May cause respiratory irritation.  
H336: May cause drowsiness or dizziness.  
H361d: Suspected of damaging the unborn child.  
H372: Causes damage to organs through prolonged or repeated exposure.  
H373: May cause damage to organs through prolonged or repeated exposure.  
H411: Toxic to aquatic life with long lasting effects.  
  
H412: Harmful to aquatic life with long lasting effects.

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

### Disclaimers

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