SURFKOAT

SAFETY DATA SHEET

Issue Date 25-March-2020 **Revision Date** **Version** 1

1. IDENTIFICATION

Product identifier
Product Name Maxx Flow 250 HP Cyclo Epoxy - Part A

Recommended use of the chemical and restrictions on use
Recommended Use Concrete Coating
Uses advised against No Data

Details of the supplier of the safety data sheet
Manufacturer Address
Surface Koatings, Inc. 134 Davis Street Portland, TN 37148 Telephone (615) 323-9461

Emergency telephone number
Company Phone Number (615) 323-9461
24 Hour Emergency Phone Number 800-535-5053 (United States & Canada), International Call: 1-352-323-3500

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Hazardous to the Aquatic Environment - Long Term (Chronic) Hazard Category 2	

Label elements

Emergency Overview

Warning

Hazard statements
H312: Harmful in contact with skin
H317: May cause an allergic skin reaction
H412: Harmful to aquatic life with long lasting effects

Appearance Colorless to yellowish. **Physical state** liquid **Odor** Slight

Precautionary statements
P264: Wash hands thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P271: Use only in well ventilated area.
P273: Avoid release to the environment
P280: Wear protective gloves/protective clothing/eye protection/face protection
P337+P313: If eye irritation persists: Get medical advice/attention.
P370+P378: In case of fire: Use for extinction: CO_2, powder or water spray.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P391: Collect spillage.
P403+P235: Store in a well-ventilated place. Keep cool.
P501: Dispose of contents/container in accordance with local/regional/national/international regulations

Other Hazards
PBT: Not applicable
vPvB: Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No.	Weight-%	Trade Secret
4,4'-Isopropylidenediphenol-Epichlorohydrin Copolymer	25068-38-6	60 - 100	*
2,2'-[(2,2-Dimethyl-1,3-propanediyl)bis(oxymethylene)]bisoxirane	17557-23-2	10 - 30	*
Nonylphenol	25154-52-3	1 - 15	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

Additional information: Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).

4. FIRST AID MEASURES

Description of first aid measures

General advice Move out of the dangerous area. Consult a physician. Provide this Safety Data Sheet to the doctor in attendance.

Eye contact IF IN EYES: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin contact IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.

Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. If symptoms persist, call a physician.

Ingestion IF SWALLOWED: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.

Most important symptoms and effects, both acute and delayed

Symptoms

Acute: This material may cause irritation to skin and eyes. Product may cause an allergic skin reaction. Chronic: Prolonged or repeated skin contact may cause allergic skin reaction or dermatitis.
Target Organs:
Acute: Eye, Skin
Chronic: Skin
Hazards: Pre-existing skin or eye problems may be aggravated by exposure to this product.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically. For additional information, see Safety Data Sheet.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Dry Chemical, Alcohol Resistant Foam, Halon or Carbon Dioxide.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical
In a fire or if heated a pressure increase may occur and the container may burst.

Hazardous combustion products Carbon dioxide (CO2). Carbon monoxide.

Explosion data
Sensitivity to Mechanical Impact Not available.
Sensitivity to Static Discharge May be ignited by friction, heat, sparks or flames.

Protective equipment and precautions for firefighters
Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions

Use personal protective equipment as required. P261 - Avoid breathing dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Wear protective gloves/protective clothing and eye/face protection.

Environmental precautions

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not allow product to enter any drains or waterways.

Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so. Dike to collect large liquid spills.

Methods for cleaning up Use a non-combustible material like vermiculite or sand to soak up the product and place into a container for later disposal. Use clean non-sparking tools to collect absorbed material. Dispose according to local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors/mists generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from heat. Keep from freezing. Store product above 50 degrees F/10 degrees C and below 95 degrees F/35 degrees C.

Incompatible materials Keep away from strong oxidizing agents, strong alkalis, and strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical facilities:
Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above. Use local exhaust ventilation to control airborne vapor. Ensure eyewash/safety shower stations are available near areas where this product is used.

Control Parameters
Ingredients with limit values that require monitoring at the workplace:
Currently, International exposure limits are not established for the components of this product. Please check with competent authority in each country for the most recent limits in place.

Exposure Controls
Personal protective equipment:
General protective and hygienic measures:
The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.

Respiratory protection:
Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid		
Appearance	Colorless to yellowish.	**Odor**	Slight
Color	Transparent Liquid - May have slight color due to performance additives.	**Odor threshold**	No data available

Property	Values	Remarks • Method
pH	Not Relevant	
Melting point / freezing point	Not Available	
Boiling point / boiling range	Not Applicable	
Flash point	230 °F	CC (closed cup)
Evaporation rate	Not Available	
Flammability (solid, gas)	Not Relevant	
Flammability Limit in Air		
Upper flammability limit:	Not Applicable	
Lower flammability limit:	Not Applicable	
Vapor pressure	Not Available	
Vapor density	Not Available	
Relative density	1.11 @ 70 Degrees F	
Water solubility	Insoluble in water	
Solubility in other solvents	Not Available	
Partition coefficient	Not Available	
Autoignition temperature	Not Available	
Decomposition temperature	Not Available	
Kinematic viscosity	Not Available	
Dynamic viscosity	Not Available	
Explosive properties	Not Available	
Oxidizing properties	Not Available	

Other Information

Softening point	Not Relevant
Molecular weight	Not Available
VOC Content (%)	< 50 g/L (Mixed A&B)
Density	Not Available
Bulk density	Not Available

10. STABILITY AND REACTIVITY

Reactivity
Not Available

Chemical stability
Stable

Possibility of Hazardous Reactions
No data available

Conditions to avoid
Contact with incompatible materials

Incompatible materials
Oxidizing agents and amines should be avoided as these will cause exothermic polymerization. Avoid extreme heat.

Hazardous Decomposition Products
Will not occur

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects: Toxicity data is available for this product.

Acute Toxicity

Acute Dermal	LD 50	> 20,000 mg/kg	Rabbit
Acute Oral	LD 50	> 5,000 mg/kg	Rat

Primary irritant effect: Contact with this product can be irritating to exposed skin and eyes.

Sensitization: This product is considered a skin sensitizer.

Additional toxicological information: None of the ingredients are found on the following lists: FEDERAL OSHA Z LIST, NTP, CAL/OSHA, IARC and therefore is not considered to be, nor suspected to be a cancer-causing agent by these agencies.

Reproductive toxicity information: No information concerning the effects of this product and its components on the human reproduction system.

12. ECOLOGICAL INFORMATION

Toxicity
Aquatic toxicity: No evidence is currently available on this product's effects on aquatic life.

Component Data: CAS# 25085-99-8
Fathead Minnow LC50 3 mg/l 96 h
Toxicity to daphnia magna EC50 1.4 -1.7 mg/l 24 h
Bacteria: IC50 >42.6 mg/l 18 h
Biodegradation: 28 days 12% OECD
Bioaccumulation: Not readily biodegradable

Persistence and degradability: No data available

Bio accumulative potential: No data available

Mobility in soil: No evidence is currently available on this product's effects on plants or animals.

Ecotoxical effects:
Remark:
Additional ecological information: No data available
General notes: No specific data is available for this product; however, this product is expected to be readily biodegradable

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT	Not regulated
Marine pollutant	Material is expected to be harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

IATA

UN/ID no.	3082
Proper shipping name	Environmentally Hazardous Substance liquid, N.O.S. (Bisphenol A epoxy resin)
Hazard Class	9
Packing Group	III

IMDG

UN/ID no.	3082
Proper shipping name	Environmentally Hazardous Substance liquid, N.O.S. (Bisphenol A epoxy resin)
Hazard Class	9
Packing Group	III

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture.
United States (USA)

SARA: This product is not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act.: None

Section 355 (extremely hazardous substances): None of the ingredients are listed.

Section 313 (Toxic Release Inventory): None of the ingredients are listed.

TSCA (Toxic Substances Control Act): All ingredients are listed.

Proposition 65 (California):
Chemicals known to cause cancer: None of the ingredients is listed.

Canada
Canadian Domestic Substances List (DSL): All ingredients are listed

Canadian Ingredient Disclosure list (limit 0.1%): None of the ingredients are listed.

Canadian Ingredient Disclosure list (limit 1%): None of the ingredients are listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	**Health Hazards** 2	**Flammability** 1	**Instability** 0	**Physical and Chemical Properties**
HMIS	**Health Hazards** 2	**Flammability** 1	**Physical Hazards** 0	**Personal Protection** X

Issue Date	25-March-2020
Revision Date	N/A
Revision Note	

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

SURFKOAT

SAFETY DATA SHEET

Issue Date 25-March-2020 **Revision Date** N/A **Version** 1

1. IDENTIFICATION

Product identifier

Product Name Maxx Flow 250 HP Cyclo Epoxy - Part B

Recommended use of the chemical and restrictions on use

Recommended Use Concrete Coating
Uses advised against No Data

Details of the supplier of the safety data sheet

Manufacturer Address
Surface Koatings, Inc. 134 Davis Street Portland, TN 37148 Telephone (615) 323-9461

Emergency telephone number

Company Phone Number (615) 323-9461
24 Hour Emergency Phone Number 800-535-5053 (United States & Canada), International Call: 1-352-323-3500

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 2
Acute toxicity - Inhalation (Vapors)	Category 4
Skin corrosion/irritation	Category 1B
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Reproductive toxicity	Category 2
Hazardous to the Aquatic Environment - Short Term (Acute) Hazard Category 2 Hazardous to the Aquatic Environment - Long Term (Chronic) Hazard Category 2	

Label elements

Emergency Overview

Danger!

Hazard statements
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H361 Suspected of damaging fertility or the unborn child.
H401 Toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Appearance Colorless to yellowish. **Physical state** liquid **Odor** Slight

Precautionary Statements - Prevention
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P30l+P330+P331+P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.
P302+P352 If on skin: Wash with soap and water.
P303+P361+P353+P310 IF ON SKIN (or hair): Remove (Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.
P304+P340+P310 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
P305+P351 +P338+P310 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 or
doctor/physician.
P308+P313 If exposed or concerned: Get medical advice/attention.
P321 Specific treatment (see supplemental first aid instructions on this label).
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.
P405 Store locked up.
P501 Dispose of contents and container as instructed in Section 13.

Precautionary Statements - Response
Collect spillage
Call a POISON CENTER or doctor/physician if you feel unwell
IF IN EYES
Immediately call a POISON CENTER or doctor/physician
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF ON SKIN:
IF ON CLOTHING
Immediately call a POISON CENTER or doctor/physician
Remove/Take off immediately all contaminated clothing
Wash contaminated clothing before reuse
If skin irritation occurs: Get medical advice/attention
IF INHALED
Immediately call a POISON CENTER or doctor/physician
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell
IF SWALLOWED
Rinse mouth
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Absorb spillage to prevent material damage
Collect spillage

Precautionary Statements - Storage
Store in well-ventilated place. Keep Cool. Keep container tightly closed. Store locked up.
Store in corrosive resistant/ .? container with a resistant inner liner

Precautionary Statements - Disposal
Dispose of contents/container in accordance with local/regional/national regulations.

Hazards not otherwise classified (HNOC)

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical Name	CAS No.	Weight-%	Trade Secret
(propylene glycol) bis(2-aminopropyl ether)	9046-10-0	70 - 90	*
1,3-Cyclohexanedimethanamine	2579-20-6	7 - 15	*
Benzyl alcohol	100-51-6	7 - 15	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice
Move out of the dangerous area. Consult a physician. Provide this Safety Data Sheet to the doctor in attendance. First responders should wear gloves and protection.

Eye contact
Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CONTROL CENTER or seek medical attention.

Skin contact
Immediately call a POISON CONTROL CENTER or seek medical attention.
Avoid direct contact and wear chemical protective clothing, if necessary. Immediately take off all contaminated clothing.
Wash with plenty of water/ soap and rinse thoroughly until medical aid is available. Gently blot or brush away excess product.
Wash contaminated clothing before re-use or discard.

Inhalation
Immediately call a POISON CONTROL CENTER or seek medical attention.
Take precautions to ensure your own safety.
Remove source of exposure or move person to fresh air and keep comfortable for breathing. If breathing has stopped, trained personnel should begin rescue breathing.
Avoid mouth-to-mouth contact by using a barrier device.
If the heart has stopped, immediately start cardiopulmonary resuscitation (CPR).

Ingestion
Immediately call a POISON CONTROL CENTER or seek medical attention.
Rinse mouth and do not induce vomiting.
If breathing has stopped, trained personnel should begin rescue breathing. Avoid mouth-to-mouth contact by using supplied air/ barrier device.
If the heart has stopped, immediately start cardiopulmonary resuscitation (CPR).

Most important symptoms and effects, both acute and delayed

Symptoms
Eye, Skin, and Respiratory Irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians
Treat symptomatically. For additional information, see Safety Data Sheet.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use Water (fog only), dry chemical, chemical foam, carbon dioxide, or alcohol-resistant foam.

Unsuitable extinguishing media Do not use water stream, as this may spread fire.

Specific hazards arising from the chemical
Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous combustion products Carbon dioxide (CO2). Carbon monoxide.

Explosion data
Sensitivity to Mechanical Impact Not available.
Sensitivity to Static Discharge May be ignited by friction, heat, sparks or flames.

Protective equipment and precautions for firefighters
Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Wear recommended personal protective equipment. Ensure adequate ventilation. Ensure air handling systems are operational.

Environmental precautions

Environmental precautions Should not be released into the environment. Prevent from reaching drains, sewer or waterway.

Methods and material for containment and cleaning up

Methods for containment & Clean-up Wear protective eye wear, gloves and clothing.
Absorb with non-combustible liquid-binding material (sand, diatomaceus earth (clay), acid binders, universal binders).
Dispose of contents/ container in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use appropriate personal protective equipment (see Section 8).
Use only with adequate ventilation.
Avoid breathing mist or vapor.
Do not eat, drink, smoke or use personal products when handling chemical substances.
Wash thoroughly after handling.
Do not swallow.
Do not get in eyes, on skin, or on clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store in a cool, well-ventilated area. Protect from freezing and physical damage. Keep container tightly sealed.
Hold bulk storage under a nitrogen blanket.

Incompatible materials Keep away from strong oxidizing agents, heat or flames. Store in steel or poly containers.

Do not store near acids. Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Benzyl Alcohol, CAS Number 100-51-6, TWA 10.00 ppm, USA. Workplace Environmental Exposure Levels (WEEL).

Appropriate engineering controls

Engineering Controls Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear chemical splash goggles and face shield when eye and face contact is possible due to splashing or spraying of material.

Skin and body protection Select glove material impermeable and resistant to the substance. Suitable gloves can be ' recommended by supplier.

Respiratory protection Respiratory protection should be worn when there is a potential to exceed the exposure limit, applicable exposure limit requirements or guidelines, use a NIOSH-approved respirator.

General Hygiene Considerations Wash hands before breaks and at the end of work. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reusing.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid		
Appearance	Colorless to yellowish.	**Odor**	Slight
Color	Transparent Liquid - May have slight color due to performance additives.	**Odor threshold**	No data available

Property	**Values**	**Remarks • Method**
pH	Not Relevant	
Melting point / freezing point	Not Available	
Boiling point / boiling range	Not Applicable	
Flash point	212 °F	CC (closed cup)
Evaporation rate	Not Available	
Flammability (solid, gas)	Not Relevant	
Flammability Limit in Air		
Upper flammability limit:	No data	
Lower flammability limit:	No data	
Vapor pressure	Not Available	
Vapor density	Not Available	
Relative density	.99 @ 70 Degrees F	
Water solubility	Insoluble in water	
Solubility in other solvents	Not Available	
Partition coefficient	Not Available	
Autoignition temperature	Not Available	
Decomposition temperature	Not Available	
Kinematic viscosity	Not Available	

Dynamic viscosity	Not Available
Explosive properties	Not Available
Oxidizing properties	Not Available

Other Information

Softening point	Not Relevant
Molecular weight	Not Available
VOC Content (%)	< 50 g/L (Mixed A&B)
Density	Not Available
Bulk density	Not Available

10. STABILITY AND REACTIVITY

Reactivity
Does not react under normal conditions of use and storage.

Chemical stability
Stable under normal conditions of use and storage.

Possibility of Hazardous Reactions
None under normal conditions of use and storage.

Conditions to avoid
Heat, flames and sparks.

Incompatible materials
Strong oxidizing agents. Strong alkali. Strong acids. Peroxides and other radical forming substances.

Hazardous Decomposition Products
Carbon monoxide, carbon dioxide, Nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Eye contact, skin contact, inhalation & ingestion

Product Information

Eyes	Acute – Severe irritant. May cause burns. Vapor may cause lacrimation and reversible corneal edema. Chronic – Conjunctivitis or corneal damage.
Skin Contact	Acute – Undiluted product quickly causes irritation. May cause chemical burns. Chronic – May cause allergic reaction/sensitization. Defatting of skin, rash and irritation.
Skin Absorption	Acute – Not Determined Chronic – Not Determined
Inhalation	Acute – Vapors may cause damage to contacted tissue and produce scarring. Chronic – Repeated and/or prolonged exposures can cause tightness of chest, shortness of breath and cough.
Ingestion	Acute – May cause irritation and bleeding of the gastrointestinal tract Chronic – Scarring of the affected tissues may occur
Acute Toxicity	No data on the product itself

Acute Oral Toxicity Components

(propyl glycol) bis(2-aminopropyl	LD50: 2885 mg/kg - Species: Rat

ether)	
1,3 Cyclohexanamine	LD50: 700 mg/kg - Species: Rat
Benzyl Alcohol	LD50: 1230 mg/kg - Species: Rat

Acute Dermal Toxicity

Components	
(propyl glycol) bis(2-aminopropyl ether)	LD50: 2980 mg/kg - Species: Rabbit
1,3 Cyclohexanamine	LD50: 1700 mg/kg - Species: Rabbit
Benzyl Alcohol	LD50: 2000 mg/kg - Species: Rabbit

Acute Inhalation Toxicity

Components	
(propyl glycol) bis(2-aminopropyl ether)	LC50: (4 HR): > 0.74 mg/l - Species: Rat
Benzyl Alcohol	LC50: (4 HR): > 4.178 mg/l - Species: Rat OECD TEST GUIDELINE 403

Skin Corrosion/Irritation	DOT Skin Corrosion Study: Corrosive in all rabbits at 3 minutes exposure
Serious Eye Damage/Eye Irritation	Severe eye irritation
Sensitization	Buehler skin sensitization (Guinea pigs): No evidence of sensitization at 5%
For Respiratory Sensitization	Not determined
Specific Target Organ Systemic Toxicity (Single Exposure)	Not determined
Specific Target Organ Systemic Toxicity (Repeated Exposure)	Not determined
Carcinogenic Data	NTP: None OSHA: None IARC: None Teratogenicity: No Mutagenicity: No Embryotoxicity: No Synergistic Material: No

12. ECOLOGICAL INFORMATION

Toxicity

Aquatic Toxicity	No data on the product itself

Acute Toxicity to Fish – Components

(propyl glycol) bis(2-aminopropyl ether)	LC50: (96 HRS) 772 mg/l - Species: Fish
1,3 Cyclohexanamine	LC50: (96 HRS) 130 mg/l - Species: Golden Orfe
Benzyl Alcohol	LC50: (96 HRS) 460 mg/l - Species: Fathead Minnow

Acute Toxicity to Aquatic Invertebrates – Components

(propyl glycol) bis(2-aminopropyl ether)	EC50: (48 HRS) 80 mg/l - Species: Daphnia Magna
1,3 Cyclohexanamine	EC50: (72 HRS) 33.1 mg/l - Species: Daphnia Magna
Benzyl Alcohol	EC50: (72 HRS) 12 mg/l - Species: Daphnia Magna

Acute Toxicity to Algae/Aquatic Plants – Components

(propyl glycol) bis(2-aminopropyl ether)	EC50: (72 HRS) 15 mg/l - Species: Fresh Water Algae
1,3 Cyclohexanamine	EC50: (72 HRS) 56.7 mg/l - Species: Fresh Water Algae
Benzyl Alcohol	EC50: (72 HRS) 700 mg/l - Species: Fresh Water Algae

Toxicity to Bacteria – Components

(propyl glycol) bis(2-aminopropyl ether)	EC50: 310 mg/l - Species: Activated Sludge
1,3 Cyclohexanamine	EC50: > 1000 mg/l - Species: Activated Sludge

Chronic Aquatic Toxicity

Chronic Toxicity to Aquatic Invertebrates	Long lasting adverse effects to aquatic organisms

Persistence and Degradability

Biodegradability	Not Biodegradable
Biodegradation	0%
Exposure Time	28 days
Method	OECD Test guideline 301B or equivalent

Bioaccumulative Potential

Bioaccumulation	
Partition Coeffecient: N-Octanol/Water (LOG Pow)	1.34

Mobility in Soil	Not determined

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Relevant Information	It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory agencies.

14. TRANSPORT INFORMATION

DOT

UN/ID no.	2735
Proper shipping name	Amines, liquid, corrosive, n.o.s. (Cyclohexanedimethanamine)
Hazard Class	8
Packing Group	III

IATA

UN/ID no.	2735
Proper shipping name	Amines, liquid, corrosive, n.o.s. (Cyclohexanedimethanamine)
Hazard Class	8
Packing Group	III

IMDG

UN/ID no.	2735
Proper shipping name	Amines, liquid, corrosive, n.o.s. (Cyclohexanedimethanamine)
Hazard Class	8
Packing Group	III

15. REGULATORY INFORMATION

Proposition 65 (California)
Chemicals known to cause cancer: None of the ingredients are listed.
Chemicals known to cause reproductive toxicity for females: None of the ingredients are listed.
Chemicals known to cause reproductive toxicity for males: None of the ingredients are listed.
Chemicals known to cause developmental toxicity: None of the ingredients are listed.

Canada	
Canadian Domestic Substance List (DSL)	One of more ingredients are not listed.
Australia	
Australian Inventory of Chemical Substances (AICS)	One or more ingredients are not listed.
China	
Inventory of Existing Chemical Substances in China (IECSC)	All ingredients are listed.
Japan	
Inventory of Existing and New Chemical Substances (ENCS)	One or more ingredients are not listed.
Korea	
Existing Chemicals List (ECL)	All ingredients are listed.
New Zealand	
New Zealand Inventory of Chemicals (NZOIC)	One or more ingredients are not listed.
Philippines	
Philippine Inventory of Chemicals and Chemical Substances (PICCS)	One or more ingredients are not listed.
Taiwan	
Taiwan Chemical Substance Inventory (TSCI)	All ingredients are listed.

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	**Health hazards** 3	**Flammability** 1	**Instability 0**	**Physical and Chemical Properties** -
HMIS	**Health hazards** 3	**Flammability** 1	**Physical hazards** 0	**Personal protection** X

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Revision Date	N/A
Revision Note	

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