Colorberry GmbH

Safety Data Sheet
BERRY RESIN, RESIN, Comp. A

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

Product identifier

Product name	BERRY Resin, RESIN, comp. A
Brand	Colorberry
UFI	4F00-40XN-K003-5SVF

Relevant identified uses of the substance or mixture and uses advised against
For artistic use

Details of the supplier of the safety data sheet

Name	Colorberry GmbH
Address	Wolfsberg 1 85667 Oberpframmern Bayern Germany
Telephone	004915110016131
email	kontakt@colorberry.de

Emergency telephone number

004915110016131

SECTION 2: Hazards identification

Classification of the substance or mixture

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

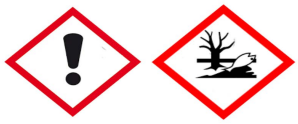
- Serious eye damage/eye irritation, Cat. 2, H319
- Skin corrosion/irritation, Cat. 2, H315
- Skin sensitizer, Cat. 1, H317
- Hazardous to the aquatic environment, long-term (chronic), Cat. 2, H411

For the full text corresponding to the "H"-codes displayed in this section, refer to Section 16.

Label elements

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

Hazard pictograms



Signal word **Warning**

Hazard statements

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

H411	Toxic to aquatic life with long lasting effects

Precautionary statements

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P273	Avoid release to the environment.
P391	Collect spillage.
P501	Dispose of contents and container to licensed, permitted incinerator, or other thermal destruction device.

Contains: 2,2-Bis(4-hydroxyphenyl)propane-epichlorohydrin copolymer (CAS: 25068-38-6)
UFI 4F00-40XN-K003-5SVF

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

Component	Concentration
Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700) (CAS no.: 25068-38-6; EC no.: 500-033-5; Index no.: 603-074-00-8)	**80 - 90 % (weight)**
[CLASSIFICATIONS]: Skin corrosion/irritation, Cat. 2; Serious eye damage/eye irritation, Cat. 2; Skin sensitizer, Cat. 1; Hazardous to the aquatic environment, long-term (chronic), Cat. 2. [HAZARDS]: H315 - Causes skin irritation; H317 - May cause an allergic skin reaction; H319 - Causes serious eye irritation; H411 - Toxic to aquatic life with long lasting effects. [SCLs/M-factors/ATEs]: Eye Irrit. 2; H319: C ≥ 5 %; Skin Irrit. 2; H315: C ≥ 5 %	
Alkyl epoxy resin (CAS no.: 68609-97-2; EC no.: 271-846-8; Index no.: 603-103-00-4)	**3 - 5 % (weight)**
[CLASSIFICATIONS]: Skin corrosion/irritation, Cat. 2; Skin sensitizer, Cat. 1. [HAZARDS]: H315 - Causes skin irritation; H317 - May cause an allergic skin reaction.	
Benzoic acid, 4-[[(methylphenylamino)methylene]amino]-, ethyl ester (CAS no.: 57834-33-0)	**1 - 5 % (weight)**
[CLASSIFICATIONS]: No data available. [HAZARDS]: No data available.	

SECTION 4: First aid measures

Description of first aid measures

General notes	First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.
Following inhalation	Move person to fresh air; if effects occur, consult a physician.
Following skin contact	Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands.
Following eye contact	Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist. Suitable emergency eye wash facility should be available in work area.
Following ingestion	No emergency medical treatment necessary.

Self-protection of the first aider Not available

Most important symptoms and effects, both acute and delayed
Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed
Notes to physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5: Firefighting measures

Extinguishing media
Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective. Water fog, applied gently may be used as a blanket for fire extinguishment.

Special hazards arising from the substance or mixture
During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion
products may include and are not limited to: Phenolics. Carbon monoxide. Carbon dioxide.

Advice for firefighters
Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Water fog, applied gently may be used as a blanket for fire extinguishment. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage. Review the “Accidental Release Measures” and the “Ecological Information” sections of this (M)SDS.
Special protective equipment for firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location. For protective equipment in post-fire or non-fire clean-up situations, refer to the relevant sections.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment.

Methods and material for containment and cleaning up
Contain spilled material if possible. Absorb with materials such as: Sand. Polypropylene fiber products. Polyethylene fiber products. Remove residual with soap and hot water. Collect in suitable and properly labeled containers. Residual can be removed with solvent. Solvents are not recommended for clean-up unless the recommended exposure guidelines and safe handling practices for the specific solvent are followed.

Reference to other sections
References to other sections, if applicable, have been provided in the previous sub-sections.

SECTION 7: Handling and storage

Precautions for safe handling
Avoid prolonged or repeated contact with skin. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Avoid use of electric band heaters.
Failures of electric band heaters have been reported to cause drums of liquid epoxy resin to explode and catch fire. Application of a direct flame to a container of liquid epoxy resin can also cause explosion and/or fire.

Conditions for safe storage, including any incompatibilities
Recommended pumping and storage temperature for bulk shipments is 60°C (140°F) Additional storage and handling information
on this product may be obtained by calling your sales or customer service contact

Specific end use(s)
Storage stability
Storage temperature: 2 - 43 °C
Shelf life: Use within 24 Months

SECTION 8: Exposure controls/personal protection

Control parameters

1. EPOXYRESIN, reaction product: BISPHENOL-A(EPICHLOROHYDRIN), average molecule wei (CAS: 25068-38-6)
Value n/a

2. Alkyl epoxy resin (CAS: 68609-97-2)
Value n/a

Exposure controls

Appropriate engineering controls
Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Individual protection measures, such as personal protective equipment

Eye and face protection
Use safety glasses (with side shields).

Skin protection
se gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Ethyl vinyl alcohol laminate
("EVAL"). Nitrile/butadiene rubber ("nitrile" or "NBR"). Neoprene. Polyvinyl chloride ("PVC" or "vinyl").

Body protection
Use protective clothing chemically resistant to this material.
Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Respiratory protection
Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions, no respiratory protection should be needed; however, if material is heated or sprayed, use an approved air-purifying respirator. Use the following CE approved air-purifying respirator: Organic vapor cartridge with a particulate pre-filter, type AP2

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Colour	Clear till slightly blue
Odour	Mild
Odour threshold	Not available
Melting point/freezing point	Not available
Boiling point or initial boiling point and boiling range	Not applicable
Flammability	No
Lower and upper explosive limit	Not applicable
Flash point	>249 °C closed cup
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available
pH	Not available
Kinematic viscosity	4750 mPa.s at 25 °C
Solubility	insoluble
Partition coefficient n-octanol/water (log value)	Not available
Vapour pressure	Neg. mm Hg at 20 °C
Evaporation rate	Neg. (ether = 1)
Density and/or relative density	1,220 kg/l
Relative vapour density	Not available

Particle characteristics
Not available

Other information

Information with regard to physical hazard classes

Other safety characteristics

SECTION 10: Stability and reactivity

Reactivity
no data available

Chemical stability
Stable under recommended storage conditions

Possibility of hazardous reactions
Will not occur by itself. Masses of more than one pound (0.5 kg) of product plus an aliphatic amine will cause irreversible polymerization with considerable heat build-up.

Conditions to avoid
Avoid short term exposures to temperatures above 300 °C
Potentially violent decomposition can occur above 350 °C
Avoid prolonged exposure to temperatures above 250 °C
Generation of gas during decomposition can cause pressure in closed systems. Pressure build-up can be rapid

Incompatible materials
Avoid contact with oxidizing materials. Avoid contact with: Acids. Bases. Avoid unintended contact with amines

Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials. Gases are released during decomposition. Uncontrolled exothermic reaction of epoxy resins release phenolics, carbon monoxide, and water.

SECTION 11: Toxicological information

Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity
Acute oral toxicity
Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.
LD50, Rat, > 15,000 mg/kg
Acute dermal toxicity
Prolonged skin contact is unlikely to result in absorption of harmful amounts.
LD50, Rabbit, 23,000 mg/kg
Acute inhalation toxicity
At room temperature, exposure to vapor is minimal due to low volatility. Vapor from heated material, mist or aerosols may cause respiratory irritation.

Skin corrosion/irritation
Prolonged contact may cause skin irritation with local redness.
Repeated contact may cause skin irritation with local redness.

Serious eye damage/irritation
May cause eye irritation.
Corneal injury is unlikely.

Respiratory or skin sensitization
For similar material(s):
Has caused allergic skin reactions in humans.
Has demonstrated the potential for contact allergy in mice.
For respiratory sensitization:
No relevant data found.

Germ cell mutagenicity
In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were negative.

Carcinogenicity
Many studies have been conducted to assess the potential carcinogenicity of diglycidyl ether of bisphenol A (DGEBPA). Indeed, the most recent review of the available data by the International Agency for Research on Cancer (IARC) has concluded that DGEBPA is not classified as a carcinogen. Although some weak evidence of carcinogenicity has been reported in animals, when all of the data are considered, the weight of evidence does not show that DGEBPA is carcinogenic.

Reproductive toxicity
In animal studies, did not interfere with reproduction

STOT-single exposure
Evaluation of available data suggests that this material is not an STOT-SE toxicant.

STOT-repeated exposure
Except for skin sensitization, repeated exposures to low molecular weight epoxy resins of this type are not anticipated to cause any significant adverse effects.

Aspiration hazard
Based on physical properties, not likely to be an aspiration hazard.

Information on other hazards

SECTION 12: Ecological information

Toxicity
Material is toxic to aquatic organisms.

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Mobility in soil
Potential for mobility in soil is low

Results of PBT and vPvB assessment
This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

Endocrine disrupting properties
No data available

Other adverse effects
This substance is not in Annex I of Regulation (EC) No 1005/2009 on substances that deplete the ozone layer

SECTION 13: Disposal considerations

Waste treatment methods

Waste treatment
This product, when being disposed of in its unused and uncontaminated state should be treated as a hazardous waste according to EC Directive 2008/98/EC. Any disposal practices must be in compliance with all national and provincial laws and any municipal or local by-laws governing hazardous waste. For used, contaminated and residual materials additional evaluations may be required. Do not dump into any sewers, on the ground, or into any body of water. The definitive assignment of this material to the appropriate EWC group and thus its proper EWC code will depend on the use that is made of this material. Contact the authorized waste disposal services.

SECTION 14: Transport information

DOT (US)
UN Number: UN3082
Class: 9
Packing Group: III
Proper Shipping Name: Environmentally hazardous substances, liquid, n.o.s. (Epoxy resin)
Reportable quantity (RQ):
Marine pollutant:
Poison inhalation hazard:

IMDG
UN Number: UN3082
Class: 9
Packing Group: III
EMS Number:
Proper Shipping Name: Environmentally hazardous substances, liquid, n.o.s. (Epoxy resin)

IATA

UN Number: UN3082
Class: 9
Packing Group: III
Proper Shipping Name: Environmentally hazardous substances, liquid, n.o.s. (Epoxy resin)

SECTION 15: Regulatory information

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

Canadian Domestic Substances List (DSL)
Chemical name: Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane
CAS: 25068-38-6

Canadian Domestic Substances List (DSL)
Chemical name: Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.
CAS: 68609-97-2

Canadian Non-Domestic Substances List (NDSL)
Chemical name: Benzoic acid, 4-[[(methylphenylamino)methylene]amino]-, ethyl ester
CAS: 57834-33-0

HMIS Rating

BERRY Resin, RESIN

Personal protection

SECTION 16: Other information

Full text of hazard statements referenced in Section 2

H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H411	Toxic to aquatic life with long lasting effects

The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws.

vers. 1 / Sept 2022

Colorberry GmbH

Safety Data Sheet
BERRY RESIN , Hardener, Comp. B

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

Product identifier

Product name	Berry Resin , Hardener, Comp. B
UFI: FH00-N0N1-V00M-T4FH	

Relevant identified uses of the substance or mixture and uses advised against
For artistic use

Details of the supplier of the safety data sheet

Name	Colorberry GmbH
Address	Wolfersberg 1 85667 Oberpframmern Germany
Telephone	004915110016131

Emergency telephone number

004915110016131

SECTION 2: Hazards identification

Classification of the substance or mixture

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

- Acute toxicity, dermal, Cat. 4, H312
- Acute toxicity, oral, Cat. 4, H302
- Serious eye damage/eye irritation, Cat. 1, H318
- Skin corrosion/irritation, Cat. 1B, H314
- Skin sensitizer, Cat. 1, H317
- Hazardous to the aquatic environment, long-term (chronic), Cat. 2, H411

For the full text corresponding to the "H"-codes displayed in this section, refer to Section 16.

Label elements

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

Hazard pictograms

Signal word **Danger**

Hazard statements

H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H411	Toxic to aquatic life with long lasting effects

Precautionary statements

P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/...if you feel unwell,
P302+P352+P312	IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/ doctor if you feel unwell.
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/doctor/...
P501	Dispose of contents/container to licensed, permitted incinerator or other thermal destruction device
P273	Avoid release to the environment.
P391	Collect spillage.

Contains: Propylidynetrimethanol, propoxylated, reaction products with ammonia (CAS 39423-51-3), 3-AMINOMETHYL 3,5,5-TRIMETHYLCYCLOHEXYLAMINE (CAS no.: 2855-13-2), 2-PIPERAZIN-1-YLETHYLAMINE (CAS no.: 140-31-8)

UFI: FH00-N0N1-V00M-T4FH

SECTION 3: Composition/information on ingredients

Mixtures

Components

Component — **Concentration**

Poly[oxy(methyl-1,2-ethanediyl)], alpha-hydro-omega-(2-aminomethylethoxy)-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) (CAS no.: 39423-51-3)

60 - 80 % (weight)

[CLASSIFICATIONS]: Acute toxicity, oral, Cat. 4; Acute toxicity, dermal, Cat. 4; Serious eye damage/eye irritation, Cat. 1; Hazardous to the aquatic environment, long-term (chronic), Cat. 2.

2-PIPERAZIN-1-YLETHYLAMINE (CAS no.: 140-31-8; EC no.: 205-411-0; Index no.: 612-105-00-4)

1 - 5 % (weight)

[CLASSIFICATIONS]: Acute toxicity, dermal, Cat. 4; Acute toxicity, oral, Cat. 4; Skin corrosion/irritation, Cat. 1B; Skin sensitizer, Cat. 1; Hazardous to the aquatic environment, long-term (chronic), Cat. 3. [HAZARDS]: H302 - Harmful if swallowed; H312 - Harmful in contact with skin; H314 - Causes severe skin burns and eye damage; H317 - May cause an allergic skin reaction; H412 - Harmful to aquatic life with long lasting effects.

Reaction product: BISPHENOL-A(EPICHLOROHYDRIN), average molecule weight <= 700 (CAS no.: 25068-38-6; EC no.: 500-033-5; Index no.: 603-074-00-8)

5 - 10 % (weight)

[CLASSIFICATIONS]: Skin corrosion/irritation, Cat. 2; Serious eye damage/eye irritation, Cat. 2A; Skin sensitizer, Cat. 1; Hazardous to the aquatic environment, long-term (chronic), Cat. 2. [HAZARDS]: H315 - Causes skin irritation; H317 - May cause an allergic skin reaction; H319 - Causes serious eye irritation; H411 - Toxic to aquatic life with long lasting effects. [SCLs/M-factors/ATEs]: Eye Irrit. 2; H319: C ≥ 5 %; Skin Irrit. 2; H315: C ≥ 5 %

3-AMINOMETHYL-3,5,5-TRIMETHYLCYCLOHEXYLAMINE (CAS no.: 2855-13-2; EC no.: 220-666-8; Index no.: 612-067-00-9)

5 - 10 % (weight)

[CLASSIFICATIONS]: Acute toxicity, dermal, Cat. 4; Acute toxicity, oral, Cat. 4; Skin corrosion/irritation, Cat. 1B; Skin sensitizer, Cat. 1; Hazardous to the aquatic environment, long-term (chronic), Cat. 3. [HAZARDS]: H302 - Harmful if swallowed; H312 - Harmful in contact with skin; H314 - Causes severe skin burns and eye damage; H317 - May cause an allergic skin reaction; H412 - Harmful to aquatic life with long lasting effects.

SECTION 4: First aid measures

Description of first aid measures

General notes	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
Following inhalation	Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. Acute and delayed symptoms and effects: May cause respiratory irritation. Signs/symptoms may include burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema.
Following skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower for at least 15 minutes. Call a poison center or doctor if irritation develops or persists. Wash contaminated clothing before reuse. Acute and delayed symptoms and effects: Causes severe skin burns. Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.
Following eye contact	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor. Acute and delayed symptoms and effects: Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.
Following ingestion	Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person. Acute and delayed symptoms and effects: Harmful if swallowed. Causes burns to nose, mouth, throat, and digestive tract. Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea, blood in the feces and/or vomitus may also be seen. Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Acute and delayed symptoms and effects: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

Indication of any immediate medical attention and special treatment needed
No data available.

SECTION 5: Firefighting measures

Extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture
nitrogen oxides, carbon oxides. The substance / group of substances mentioned can be released in case of fire.

Advice for firefighters
Avoid any skin contact. Effects of contact or inhalation may be delayed. Fire may produce irritating, corrosive and/or toxic gases. Runoff from fire control or dilution water may be corrosive and/or toxic and cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Structural firefighters' protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations where direct contact with the substance is possible.

Further information
Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear respiratory protection if necessary. Avoid breathing gas, mist, vapors, or spray. Ensure adequate ventilation.
Evacuate personnel to safe areas.
For personal protection see section 8.

Environmental precautions
Do not let product enter drains.

Methods and material for containment and cleaning up
Stop leak if you can do it without risk. Sweep up and shovel into suitable containers for disposal. Pick up wih suitable absorbent material (e.g. sand, sawdust, general-purpose binder)

Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

Precautions for safe handling
Do not swallow. Do not breathe mist, vapors, or spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. See Section 8 for information on Personal Protective Equipment.

Conditions for safe storage, including any incompatibilities
Store locked up. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children.

Specific end use(s)

Apart from the uses mentioned in section 1 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

Control parameters

Exposure controls

Appropriate engineering controls
Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment

Pictograms

Eye and face protection

Tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Ensure that eyewash stations and/or safety showers are close to the workstation location if working with concentrated product.

Skin protection
Wear protective gloves. Consult manufacturer specifications for further information.

Body protection
Wear protective clothing. Clothing with full length sleeves and pants should be worn. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Thermal hazards
No data available.

Environmental exposure controls
Do not let product enter drains.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	liquid
Colour	clear, light yellow
Odour	ammoniacal
Odour threshold	No data available.
Melting point/freezing point	No data available.

Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
Lower and upper explosive limit	No data available.
Flash point	218,5°C closed cup
Explosive properties	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Oxidising properties	No data available.
pH	11.6 (concentration 50 g/l)
Kinematic viscosity	No data available.
Solubility	No data available.
Partition coefficient n-octanol/water (log value)	No data available.
Vapour pressure	No data available.
Evaporation rate	No data available.
Density and/or relative density	1,1 g/cm3
Relative vapour density	No data available.

Other information

Information with regard to physical hazard classes

Other safety characteristics
No data available.

SECTION 10: Stability and reactivity

Reactivity
Contact with incompatible materials. Sources of ignition. Exposure to heat.

Chemical stability
Stable under normal storage conditions.

Possibility of hazardous reactions
No data available.

Conditions to avoid
Heat, flames and sparks. Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials
Strong acids

Hazardous decomposition products
No data available.

SECTION 11: Toxicological information

Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Components:
Propylidynetrimethanol, propoxylated, reaction products with ammonia
Acute oral toxicity : LD50 (Rat, female): 550 mg/kg

Acute dermal toxicity : LD50 (Rat, male and female): > 1 000 mg/kg
Acute inhalation toxicity : No data available

2-piperazin-1-ylethylamine (mixture)
Acute oral toxicity : Acute toxicity estimate : 1 701 mg/kg
Acute dermal toxicity : Acute toxicity estimate : > 2 000 mg/kg
Acute inhalation toxicity : Acute toxicity estimate : > 2 000 mg/kg

Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700)
Acute oral toxicity : LD50, Rat, > 15,000 mg/kg, Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts
Acute dermal toxicity : LD50, Rabbit, 23,000 mg/kg, Prolonged skin contact is unlikely to result in absorption of harmful amounts.
Acute inhalation toxicity : The LC50 has not been determined. At room temperature, exposure to vapor is minimal due to low volatility. Vapor from heated material, mist or aerosols may cause respiratory irritation.

3-aminomethyl-3,5,5-trimethylcyclohexylamine
Acute oral toxicity : LD50 rat (oral): 1,030 mg/kg
Acute dermal toxicity : LD50 rat (dermal): > 2,000 mg/kg
Acute inhalation toxicity : > 5.01 mg/l 4 h

Skin corrosion/irritation
Components:
Propylidynetrimethanol, propoxylated, reaction products with ammonia
Mild skin irritation

2-piperazin-1-ylethylamine
Acute toxicity estimate : > 2 000 mg/kg
Causes burns.

Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700)
Prolonged contact may cause skin irritation with local redness

3-aminomethyl-3,5,5-trimethylcyclohexylamine
Corrosive! Damages skin and eyes.

Serious eye damage/irritation
Components:
Propylidynetrimethanol, propoxylated, reaction products with ammonia
Irreversible effects on the eye

2-piperazin-1-ylethylamine
May cause irreversible eye damage.

Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700)
May cause eye irritation.

3-aminomethyl-3,5,5-trimethylcyclohexylamine
Corrosive! Damages skin and eyes.

Respiratory or skin sensitization
Components:

Propylidynetrimethanol, propoxylated, reaction products with ammonia
Did not cause sensitisation

2-piperazin-1-ylethylamine
May cause sensitisation by skin contact.

Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700)
No relevant data found.

3-aminomethyl-3,5,5-trimethylcyclohexylamine
Sensitization after skin contact possible.

Germ cell mutagenicity
Components:
Propylidynetrimethanol, propoxylated, reaction products with ammonia
Study scientifically not justified

2-piperazin-1-ylethylamine
Study scientifically not justified

Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700)
Study scientifically not justified

3-aminomethyl-3,5,5-trimethylcyclohexylamine
Study scientifically not justified

Carcinogenicity
Components:
Propylidynetrimethanol, propoxylated, reaction products with ammonia
Study scientifically not justified

2-piperazin-1-ylethylamine (mixture)
No data available

Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700)
Many studies have been conducted to assess the potential carcinogenicity of diglycidyl ether of bisphenol A (DGEBPA). Indeed, the most recent review of the available data by the International Agency for Research on Cancer (IARC) has concluded that DGEBPA is not classified as a carcinogen. Although some weak evidence of carcinogenicity has been reported in animals, when all of the data are considered, the weight of evidence does not show that DGEBPA is carcinogenic.

3-aminomethyl-3,5,5-trimethylcyclohexylamine
Study scientifically not justified

Reproductive toxicity
Components:
Propylidynetrimethanol, propoxylated, reaction products with ammonia
No effects on fertility and early embryonic development were detected.

2-piperazin-1-ylethylamine (mixture)
No data available

Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700)

In animal studies, did not interfere with reproduction

3-aminomethyl-3,5,5-trimethylcyclohexylamine
Study scientifically not justified

STOT-single exposure
Components:
Propylidynetrimethanol, propoxylated, reaction products with ammonia
No data available

2-piperazin-1-ylethylamine
No data available

Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700)
Evaluation of available data suggests that this material is not an STOT-SE toxicant

3-aminomethyl-3,5,5-trimethylcyclohexylamine
The available information is not sufficient for the evaluation of specific target organ toxicity.

STOT-repeated exposure
Components:
Propylidynetrimethanol, propoxylated, reaction products with ammonia
No data available

2-piperazin-1-ylethylamine
The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 1.

Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700)
Except for skin sensitization, repeated exposures to low molecular weight epoxy resins of this type are not anticipated to cause any significant adverse effects

3-aminomethyl-3,5,5-trimethylcyclohexylamine
The available information is not sufficient for the evaluation of specific target organ toxicity.

Aspiration hazard
Components:
Propylidynetrimethanol, propoxylated, reaction products with ammonia
No data available

2-piperazin-1-ylethylamine
No data available

Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700)
No data available

3-aminomethyl-3,5,5-trimethylcyclohexylamine
The substance may cause damage to the kidney after repeated ingestion of high doses, as shown in animal studies.

Information on other hazards

Components:
Propylidynetrimethanol, propoxylated, reaction products with ammonia
No data available

2-piperazin-1-ylethylamine
No data available

Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700)
Based on physical properties, not likely to be an aspiration hazard

3-aminomethyl-3,5,5-trimethylcyclohexylamine
No data available

Other information

No data available

SECTION 12: Ecological information

Toxicity

No data available on product

Persistence and degradability

No data available on product

Bioaccumulative potential

No data available on product

Mobility in soil
No data available.

Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

SECTION 13: Disposal considerations

Waste treatment methods

Product disposal
Disposal should be in accordance with applicable Federal, State and local laws and regulations. Local regulations may be more stringent than State or Federal requirements.

Packaging disposal
Dispose of as unused product.

SECTION 14: Transport information

UN Number	UN3082

UN Proper Shipping Name	Environmentally hazardous substances, liquid, n.o.s. (TRIMETHYLOLPROPANE POLYOXYPROPYLENE TRIAMINE)
Transport hazard class(es)	9
Packing group	III

SECTION 15: Regulatory information

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

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Acute Health Hazard

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components
No components are subject to the Pennsylvania Right To Know Act.

New Jersey Right To Know Components
No components are subject to the New Jersey Right To Know Act.

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Canadian Domestic Substances List (DSL)
Chemical name: Poly[oxy(methyl-1,2-ethanediyl)], α-hydro-ω-(2-aminomethylethoxy)-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1)
CAS: 39423-51-3

New Jersey Right To Know Components
Common name: N-AMINOETHYLPIPERAZINE
CAS number: 140-31-8

Pennsylvania Right To Know Components
Chemical name: 1-Piperazineethanamine
CAS number: 140-31-8

Canadian Domestic Substances List (DSL)
Chemical name: 1-Piperazineethanamine
CAS: 140-31-8

Canadian Domestic Substances List (DSL)
Chemical name: Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane
CAS: 25068-38-6

New Jersey Right To Know Components
Common name: ISOPHORONEDIAMINE
CAS number: 2855-13-2

Canadian Domestic Substances List (DSL)
Chemical name: Cyclohexanemethanamine, 5-amino-1,3,3-trimethyl-
CAS: 2855-13-2

HMIS Rating

BERRY Resin , Hardener, Comp. B

Personal protection

SECTION 16: Other information

Full text of hazard statements referenced in Section 2

H302	Harmful if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H411	Toxic to aquatic life with long lasting effects

Further information/disclaimer

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