

SAFETY DATA SHEET

SECTION 1) IDENTIFICATION

Product ID: Rapid Patch Hairline Crack Repair Part A
Product Name: Epoxy crack repair Part A
Revision Date: Nov 6, 2023 **Date Printed:** Nov 6, 2023
Version: 1.0 **Supersedes Date:** N.A.
Manufacturer's Name: TCC Materials
Address: 2025 Centre Pointe Blvd, Mendota Heights, MN, US, 55120
Emergency Phone: 651-688-9116
Information Phone Number: 651-905-8137
Fax:
Product/Recommended Uses:

SECTION 2) HAZARDS IDENTIFICATION

Classification

Eye Irritation - Category 2A
Skin Irritation - Category 2
Skin Sensitizer - Category 1
Acute aquatic toxicity - Category 2
Chronic aquatic toxicity - Category 2

Safety data sheet prepared in accordance to the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

Pictograms



Signal Word

Warning

Hazardous Statements - Health

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

Hazardous Statements - Environmental

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - General

P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read label before use.

Precautionary Statements - Prevention

- P273 - Avoid release to the environment.
- P264 - Wash thoroughly after handling.
- P280 - Wear protective gloves,protective clothing,eye protection/face protection.
- P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
- P272 - Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements - Response

- P391 - Collect spillage.
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337 + P313 - If eye irritation persists: Get medical advice/attention.
- P302 + P352 - IF ON SKIN: Wash with plenty of water.
- P321 - Specific treatment (see First-Aid on this label).
- P362 + P364 - Take off contaminated clothing. And wash it before reuse.
- P333 + P313 - If skin irritation or a rash occurs: Get medical advice/attention.

Precautionary Statements - Storage

No precautionary statement available.

Precautionary Statements - Disposal

P501 - Dispose of contents/container in accordance with local/national/international regulations.

Hazards Not Otherwise Classified (HNOC)

None.

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	GHS Classifications	% By Weight
0025068-38-6	BISPHENOL A DIGLYCIDYL ETHER POLYMER	Aquatic Acute 2, H401; Aquatic Chronic 2, H411; Eye Irr. 2A, H319; Skin Irr. 2, H315; Skin Sens. 1, H317	75% - 95%
0068609-97-2	EPOXIDE RESINS, LIQUID	Eye Irr. 2, H319; Skin Irr. 2, H315; Skin Sens. 1, H317	0% - 10%
0017557-23-2	DIGLYCIDYL ETHER OF NEOPENTYL GLYCOL	Acute Tox. Oral 5, H303; Eye Irr. 2, H319; Skin Irr. 2, H315; Skin Sens. 1, H317	0% - 10%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

Eye Contact

If eye irritation persists: Get medical advice/attention. Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 15-20 minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. Avoid direct contact. Wear chemical protective gloves, if necessary.

Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash with plenty of lukewarm, gently flowing water for a duration of 15-20 minutes. If skin irritation or a rash occurs: Get medical advice/attention. Wash contaminated clothing before re-use or discard.

Ingestion

Rinse mouth. If you feel unwell/If concerned: Call a POISON CENTER/doctor.

Most important symptoms and effects, both acute and delayed

No data available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. No specific treatment is required. No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Treat according to symptoms (decontamination, vital functions), no known specific antidote. Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Small Fire : Dry chemical, foam, carbon dioxide, water-spray or alcohol-resistant foam. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Large Fire : Water spray, fog or alcohol-resistant foam.

Unsuitable Extinguishing Media

Do not use straight stream of water.

Specific Hazards in Case of Fire

Fire will produce irritating gases. Runoff may pollute waterways

Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Cool containers with flooding quantities of water until well after fire is out. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Isolate hazard area and keep unauthorized personnel away. Stay uphill and/or upstream. Ventilate closed spaces before entering. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Recommended Equipment

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA).

Personal Precautions

Avoid breathing vapor or mist. Do not get on skin, eyes or clothing.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and Materials for Containment and Cleaning up

Absorb Liquids in vermiculite, dry sand, earth, or similar inert material and deposit in sealed containers for disposal. Ventilate area after clean-up is complete.

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use. Avoid breathing vapor or mist. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. All containers must be properly labelled. Eyewash stations and showers should be available in areas where this material is used and stored Do not get in eyes, on skin, or on clothing.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Report ventilation failures immediately.

Storage Room Requirements

Store in a cool, dry, well ventilated area, away from sources of ignition and incompatibilities. Keep containers securely sealed when not in use. Containers that have been opened must be carefully resealed to prevent leakage. Indoor storage should meet OSHA standards and appropriate fire codes. Empty containers retain residue and may be dangerous.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids.

Skin Protection

Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Use of chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and microorganisms. Examples of preferred glove barrier materials include: Butyl rubber, Polyethylene, Chlorinated polyethylene, Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Viton, Neoprene, Polyvinyl chloride ("PVC" or "vinyl"), Nitrile/butadiene rubber ("nitrile" or "NBR").

Full contact Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 480 min

Material tested: Butoject® (KCL 897 / Aldrich Z677647, Size M).

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 30 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M).

Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

None of the chemicals in Section 3 are regulated under "ACGIH_carcinogen", "ACGIH_Notations", "ACGIH_TLV_Basis", "ACGIHsmg", "ACGIHsppm", "ACGIHtmg", "ACGIHtppm", "NIOSH_carcinogen", "nioshsmg", "nioshsppm", "nioshtmg", "nioshtppm", "OSHA_SkinDesignation", "OSHA_Tables_Z1_Z2_Z3", "OSHA_Carcinogen - OSHA Carcinogen", "OSHAsmg", "OSHA_sppm", "OSHA_tmg", "OSHA_tppm"

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	9.34 lb/gal
Specific Gravity	1.12
% Solids By Weight	NA
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Appearance	N/A
Odor Description	N/A
pH	N/A
Water Solubility	N/A
Flammability	N/A
Flash Point	N/A
Viscosity	N/A
Lower Explosion Level	N/A
Upper Explosion Level	N/A
Vapor Density	N/A

Freezing Point	N/A
Melting Point	N/A
Low Boiling Point	N/A
Evaporation Rate	N/A
Coefficient Water/Oil	N/A

SECTION 10) STABILITY AND REACTIVITY

Stability

Stable under normal storage and handling conditions.

Conditions To Avoid

Avoid heat, sparks, flame, high temperature and contact with incompatible materials.

Hazardous Reactions/Polymerization

Will not occur.

Incompatible Materials

Strong bases, acids, and oxidizing agents.

Hazardous Decomposition Products

Oxides of carbon.

SECTION 11) TOXICOLOGICAL INFORMATION

Acute Toxicity

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

The Acute Toxicity Estimate (ATE) for an oral exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for a dermal exposure to this mixture is >5000 mg/kg body weight

The Acute Toxicity Estimate (ATE) for an inhalation (vapour) exposure to this mixture is >20 mg/l

Aspiration Hazard

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

Carcinogenicity

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

Germ Cell Mutagenicity

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

Reproductive Toxicity

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

Respiratory/Skin Sensitization

May cause an allergic skin reaction

Serious Eye Damage/Irritation

Causes serious eye irritation

Skin Corrosion/Irritation

Causes skin irritation

Specific Target Organ Toxicity - Repeated Exposure

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

Specific Target Organ Toxicity - Single Exposure

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

Likely Routes of Exposure

Inhalation, Ingestion, Skin contact, Eye contact

Potential Health Effects - Miscellaneous

0025068-38-6 BISPHENOL A DIGLYCIDYL ETHER POLYMER

The following medical conditions may be aggravated by exposure: skin disorders. Laboratory studies with rats have shown that petroleum distillates can cause kidney damage and kidney or liver tumors. These effects were not seen in similar studies with guinea

0068609-97-2 Epoxide resins, liquid

The following medical conditions may be aggravated by exposure: allergies, eczema, skin disorders. Irritating to the mouth, throat and stomach. Potential skin sensitizer that may cause allergic reactions and contact dermatitis resulting in severe irritation, dryness, and cracking of the skin.

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

Toxic to aquatic life

Toxic to aquatic life with long lasting effects

Persistence and Degradability

No data available.

Bioaccumulative Potential

No data available.

Mobility in Soil

No data available.

Other Adverse Effects

No data available.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, state and local laws. Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes.

SECTION 14) TRANSPORT INFORMATION

	U.S. DOT Information	IMDG Information	IATA Information
UN Number:	UN3082	UN3082	UN3082
Proper shipping name:	Environmentally hazardous substances, liquid, n.o.s. (BISPHENOL A DIGLYCIDYL ETHER POLYMER)	Environmentally hazardous substances, liquid, n.o.s. (BISPHENOL A DIGLYCIDYL ETHER POLYMER)	Environmentally hazardous substances, liquid, n.o.s. (BISPHENOL A DIGLYCIDYL ETHER POLYMER)
Hazard Class:	9	9	9
Packaging:	III	III	III
Hazardous substance (RQ):	No Data Available		
Marine Pollutant:	No Data Available	No Data Available	
Note / Special Provision:	No Data Available	No Data Available	No Data Available

Toxic-Inhalation Hazard:	No Data Available		
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SECTION 15) REGULATORY INFORMATION

Safety, health and environmental regulations

The product has been evaluated against the following relevant regulations: U.S.A Toxic Substance Control Act (TSCA) California Proposition 65 Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312 Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313 Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103

CAS	Chemical Name	% By Weight	Regulation List
0025068-38-6	BISPHENOL A DIGLYCIDYL ETHER POLYMER	75.00% - 95.00%	SARA312, TSCA
0068609-97-2	EPOXIDE RESINS, LIQUID	0.00% - 10.00%	SARA312, TSCA
0017557-23-2	DIGLYCIDYL ETHER OF NEOPENTYL GLYCOL	0.00% - 10.00%	SARA312, TSCA

Product does not contain any chemicals listed under California Proposition 65

SECTION 16) OTHER INFORMATION

Glossary

ACGIH - American Conference of Governmental Industrial Hygienists; CAS - Chemical Abstracts Service ; Chemtrec - Chemical Transportation Emergency Center; DSL - Domestic Substances List; ESL- Effects screening levels; GHS - "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations; HMIS - Hazardous Material Information Service; IATA - Dangerous Goods Regulations (DGR) for the air transport (IATA); IMDG - International Maritime Dangerous Goods Code; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Association; OEL - Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL - Permissible Exposure Limit; SARA 313 - Superfund Amendments and Reauthorization Act, Section 313; SCBA - Self Contained Breathing Apparatus; ppm - parts per million; STEL - Short-term exposure limit; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94-469; TWA - Time-weighted average; US DOT- US Department of Transportation.

Version 1.0:

Revision Date: Nov 6, 2023

First Edition.

Full text of H-Statements referred to under Section 3

- H319 Causes serious eye irritation
- H315 Causes skin irritation
- H303 May be harmful if swallowed
- H317 May cause an allergic skin reaction
- H401 Toxic to aquatic life
- H411 Toxic to aquatic life with long lasting effects

DISCLAIMER

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

SAFETY DATA SHEET

SECTION 1) IDENTIFICATION

Product ID: Rapid Patch Hairline Crack Repair Part B
Product Name: Epoxy crack repair Part B
Revision Date: Nov 6, 2023 **Date Printed:** Nov 6, 2023
Version: 1.0 **Supersedes Date:** N.A.
Manufacturer's Name: TCC Materials
Address: 2025 Centre Pointe Blvd, Mendota Heights, MN, US, 55120
Emergency Phone: 651-688-9116
Information Phone Number: 651-905-8137
Fax:
Product/Recommended Uses:

SECTION 2) HAZARDS IDENTIFICATION

Classification

Acute toxicity Dermal - Category 4
Acute toxicity Oral - Category 4
Reproductive Toxicity - Category 1B
Serious Eye Damage - Category 1
Skin Corrosion - Category 1B
Skin Sensitizer - Category 1
Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) - Category 3
Acute aquatic toxicity - Category 1
Chronic aquatic toxicity - Category 1

Safety data sheet prepared in accordance to the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS).

Pictograms



Signal Word

Danger

Hazardous Statements - Health

H312 - Harmful in contact with skin
H302 - Harmful if swallowed
H360F - May damage fertility
H314 - Causes severe skin burns and eye damage
H317 - May cause an allergic skin reaction

H335 - May cause respiratory irritation

Hazardous Statements - Environmental

H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - General

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P103 - Read label before use.

Precautionary Statements - Prevention

P273 - Avoid release to the environment.

P280 - Wear protective gloves,protective clothing,eye protection/face protection.

P264 - Wash thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

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.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P271 - Use only outdoors or in a well-ventilated area.

P233 - Keep container tightly closed.

Precautionary Statements - Response

P391 - Collect spillage.

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P312 - Call a POISON CENTER/doctor if you feel unwell.

P321 - Specific treatment (see First-Aid on this label).

P362 + P364 - Take off contaminated clothing. And wash it before reuse.

P301 + P312 - IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 - Rinse mouth.

P308 + P313 - IF exposed or concerned: Get medical advice/attention.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER or doctor.

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

P363 - Wash contaminated clothing before reuse.

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P333 + P313 - If skin irritation or a rash occurs: Get medical advice/attention.

Precautionary Statements - Storage

P405 - Store locked up.

P403 + P405 - Store in a well-ventilated place. Store locked up.

Precautionary Statements - Disposal

P501 - Dispose of contents/container in accordance with local/national/international regulations.

Hazards Not Otherwise Classified (HNOC)

None.

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	GHS Classifications	% By Weight
0068953-36-6	FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH TETRAETHYLENEPENTAMINE	N.A.	10% - 30%
0084852-15-3	4-NONYL PHENOL BRANCHED	Acute Tox. Inh. 5, H333; Acute Tox. Oral 4, H302; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Eye Dam. 1, H318; Repr. 2, H361; Skin Corr. 1B, H314	10% - 30%
0000140-31-8	AMINOETHYLPIPERAZINE	Acute Tox. Derm. 3, H311; Acute Tox. Oral 4, H302; Aquatic Chronic 3, H412; Eye Dam. 1, H318; Flam. Liq. 4, H227; Skin Corr. 1B, H314; Skin Sens. 1, H317	10% - 30%
0000100-51-6	BENZYL ALCOHOL	Acute Tox. Derm. 4, H312; Acute Tox. Inh. 3, H331; Acute Tox. Oral 4, H302; Aquatic Acute 2, H401; Eye Irr. 2A, H319; Skin Irr. 3, H316; Skin Sens. 1B, H317	0% - 10%
0002855-13-2	ISOPHORONE DIAMINE	Acute Tox. Derm. 4, H312; Acute Tox. Oral 4, H302; Aquatic Acute 3, H402; Aquatic Chronic 3, H412; Eye Dam. 1, H318; Skin Corr. 1B, H314; Skin Sens. 1A, H317	0% - 10%
0000112-24-3	TRIETHYLENE TETRAMINE	Acute Tox. Derm. 3, H311; Acute Tox. Oral 5, H303; Aquatic Acute 3, H402; Aquatic Chronic 3, H412; Eye Dam. 1, H318; Skin Corr. 1B, H314; Skin Sens. 1, H317	0% - 3%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove source of exposure or move person to fresh air and keep comfortable for breathing. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by the POISON CENTER/doctor. Immediately call a POISON CENTER or doctor. Take precautions to ensure your own safety (e.g. wear appropriate protective equipment).

Eye Contact

Rinse eyes cautiously with lukewarm, gently flowing water for several minutes, while holding the eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing for a duration of 30 minutes or until medical aid is available. Take care not to rinse contaminated water into the unaffected eye or onto the face. Immediately call a POISON CENTER or doctor. Avoid direct contact. Wear chemical protective gloves, if necessary.

Skin Contact

Wash contaminated clothing before re-use or discard. Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Rinse skin with lukewarm, gently flowing water/shower for a duration of 30 minutes or until medical aid is available. Immediately call a POISON CENTER or doctor.

Ingestion

Rinse mouth. IF exposed or concerned: Get medical advice/attention. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor. If vomiting occurs naturally, lie on your side, in the recovery position.

Most important symptoms and effects, both acute and delayed

No data available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. No specific treatment is required. No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Treat according to symptoms (decontamination, vital functions), no known specific antidote. Treatment should be supportive and based on the judgement of the physician in response to the reaction of the patient.

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Small Fire : Dry chemical, foam, carbon dioxide, water-spray or alcohol-resistant foam. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Large Fire : Water spray, fog or alcohol-resistant foam.

Unsuitable Extinguishing Media

Do not use straight stream of water.

Specific Hazards in Case of Fire

Runoff may pollute waterways Fire will produce irritating and corrosive gases.

Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. Move undamaged containers from immediate hazard area if it can be done safely. Cool containers with flooding quantities of water until well after fire is out. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Special Protective Actions

Wear protective pressure self-contained breathing apparatus (SCBA) and full turnout gear.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Stay uphill and/or upstream. Ventilate closed spaces before entering. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Evacuate and isolate hazard area and keep unauthorized personnel away.

Recommended Equipment

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA). Wear liquid tight chemical protective clothing in combination with positive pressure self-contained breathing apparatus (SCBA).

Personal Precautions

Do not breathe vapor or mist. Do not get on skin, eyes or clothing.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and Materials for Containment and Cleaning up

Absorb Liquids in vermiculite, dry sand, earth, or similar inert material and deposit in sealed containers for disposal. Ventilate area after clean-up is complete.

SECTION 7) HANDLING AND STORAGE

General

Wash hands after use. Use good personal hygiene practices. Eating, drinking and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. All containers must be properly labelled. Eyewash stations and showers should be available in areas where this material is used and stored Do not get in eyes, on skin, or on clothing. Do not breathe vapor or mist.

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. The use of local ventilation is recommended to control emissions near the source. Report ventilation failures immediately.

Storage Room Requirements

Store in a cool, dry, well ventilated area, away from sources of ignition and incompatibilities. Keep containers securely sealed when not in use. Containers that have been opened must be carefully resealed to prevent leakage. Indoor storage should meet OSHA standards and appropriate fire codes. Empty containers retain residue and may be dangerous.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear eye protection with side shields or goggles. Wear indirect-vent, impact and splash resistant goggles when working with liquids.

Skin Protection

Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Use of chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and microorganisms. Examples of preferred glove barrier materials include: Butyl rubber, Polyethylene, Chlorinated polyethylene, Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Viton, Neoprene, Polyvinyl chloride ("PVC" or "vinyl"), Nitrile/butadiene rubber ("nitrile" or "NBR").

Full contact Material: butyl-rubber Minimum layer thickness: 0.3 mm Break through time: 480 min

Material tested: Butoject® (KCL 897 / Aldrich Z677647, Size M).

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.4 mm Break through time: 30 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M).

Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use of an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber. Launder soiled clothes or properly disposed of contaminated material, which cannot be decontaminated.

Respiratory protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

None of the chemicals in Section 3 are regulated under "ACGIH_carcinogen", "ACGIH_Notations", "ACGIH_TLV_Basis", "ACGIHsmg", "ACGIHsppm", "ACGIHtmg", "ACGIHtppm", "NIOSH_carcinogen", "nioshsmg", "nioshsppm", "nioshtmg", "nioshtppm", "OSHA_SkinDesignation", "OSHA_Tables_Z1_Z2_Z3", "OSHA_Carcinogen - OSHA Carcinogen", "OSHAsmg", "OSHA_sppm", "OSHA_tmg", "OSHA_tppm"

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	7.90 lb/gal
Specific Gravity	0.95
% Solids By Weight	NA
<hr/>	
Appearance	N/A
Odor Description	N/A
pH	N/A
Water Solubility	N/A
Flammability	N/A
Flash Point	N/A
Viscosity	N/A
Lower Explosion Level	N/A
Upper Explosion Level	N/A
Vapor Density	N/A
Freezing Point	N/A
Melting Point	N/A
Low Boiling Point	N/A
Evaporation Rate	N/A
Coefficient Water/Oil	N/A

SECTION 10) STABILITY AND REACTIVITY

Stability

Stable under normal storage and handling conditions.

Conditions To Avoid

Avoid heat, sparks, flame, high temperature and contact with incompatible materials.

Hazardous Reactions/Polymerization

Will not occur.

Incompatible Materials

Strong bases, acids, and oxidizing agents.

Hazardous Decomposition Products

Oxides of carbon.

SECTION 11) TOXICOLOGICAL INFORMATION

Acute Toxicity

Harmful in contact with skin

Harmful if swallowed

The Acute Toxicity Estimate (ATE) for an oral exposure to this mixture is 838.926 mg/kg body weight

The Acute Toxicity Estimate (ATE) for a dermal exposure to this mixture is 1057.69 mg/kg body weight

The Acute Toxicity Estimate (ATE) for an inhalation (vapour) exposure to this mixture is >20 mg/l

Aspiration Hazard

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

Carcinogenicity

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

Germ Cell Mutagenicity

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

Reproductive Toxicity

May damage fertility

Respiratory/Skin Sensitization

May cause an allergic skin reaction

Serious Eye Damage/Irritation

Causes serious eye damage

0000100-51-6 BENZYL ALCOHOL

Contact with eyes causes local irritation.

Skin Corrosion/Irritation

Causes severe skin burns and eye damage

Specific Target Organ Toxicity - Repeated Exposure

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

Specific Target Organ Toxicity - Single Exposure

May cause respiratory irritation

Likely Routes of Exposure

Inhalation, Ingestion, Skin contact, Eye contact

0000100-51-6 BENZYL ALCOHOL

The substance can be absorbed into the body by inhalation of its vapour and by ingestion.

Miscellaneous Health Effects

0000100-51-6 BENZYL ALCOHOL

Inhalation of vapor may cause irritation of upper respiratory tract. Prolonged or excessive inhalation may result in headache, nausea, vomiting, and diarrhea. In severe cases, respiratory stimulation followed by respiratory and muscular paralysis, convulsions, narcosis and death may result. Ingestion may produce severe irritation of the gastrointestinal tract, followed by nausea, vomiting, cramps and diarrhea; tissue ulceration may result.

0000100-51-6 BENZYL ALCOHOL

LC50(Inhalation, rat):>500 mg/m³; Toxic effects: Behavioral - somnolence (general depressed activity) Behavioral - ataxia Lungs, Thorax, or Respiration - respiratory depression; Reference: VCVGK* "Vrednie chemichescie veshstva, galogen I kislород sodergashie organicheskie soedinenia". (Hazardous substances. Halogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume (issue)/page/year: -,132,1984

LD50(Dermal, rabbit): 2000 mg/kg; VCVGK* "Vrednie chemichescie veshstva, galogen I kislород sodergashie organicheskie soedinenia". (Hazardous substances. Halogen and oxygen containing substances), Bandman A.L. et al., Chimia, 1994. Volume (issue)/page/year: -,132,1984

LD50(Oral, rat): 1230 mg/kg; Toxic effects: Behavioral - somnolence (general depressed activity) Behavioral - excitement Behavioral - coma

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

Very toxic to aquatic life

Very toxic to aquatic life with long lasting effects

Persistence and Degradability

0000100-51-6 BENZYL ALCOHOL

Readily biodegradable.

Bioaccumulative Potential

0000100-51-6 BENZYL ALCOHOL

No potential for bioaccumulation.

Mobility in Soil

No data available.

Other Adverse Effects

No data available.

Results of the PBT and vPvB assessment

0000100-51-6 BENZYL ALCOHOL

The substance is not PBT / vPvB.

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, state and local laws. Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes.

SECTION 14) TRANSPORT INFORMATION

	U.S. DOT Information	IMDG Information	IATA Information
UN Number:	UN2735	UN2735	UN2735

Proper shipping name:	Polyamines, liquid, corrosive, n.o.s. (4-NONYL PHENOL BRANCHED, AMINOETHYLPIPERAZINE, ISOPHORONE DIAMINE, TRIETHYLENE TETRAMINE)	Polyamines, liquid, corrosive, n.o.s. (4-NONYL PHENOL BRANCHED, AMINOETHYLPIPERAZINE, ISOPHORONE DIAMINE, TRIETHYLENE TETRAMINE)	Polyamines, liquid, corrosive, n.o.s. (4-NONYL PHENOL BRANCHED, AMINOETHYLPIPERAZINE, ISOPHORONE DIAMINE, TRIETHYLENE TETRAMINE)
Hazard Class:	8	8	8
Packaging:	II	II	II
Hazardous substance (RQ):	No Data Available		
Marine Pollutant:	No Data Available	No Data Available	
Note / Special Provision:	No Data Available	No Data Available	No Data Available
Toxic-Inhalation Hazard:	No Data Available		

SECTION 15) REGULATORY INFORMATION

Safety, health and environmental regulations

The product has been evaluated against the following relevant regulations: U.S.A Toxic Substance Control Act (TSCA) California Proposition 65 Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312 Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313 Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 103

CAS	Chemical Name	% By Weight	Regulation List
0068953-36-6	FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH TETRAETHYLENEPENTAMINE	10.00% - 30.00%	SARA312, TSCA
0084852-15-3	4-NONYL PHENOL BRANCHED	10.00% - 30.00%	SARA313, SARA312, TSCA
0000140-31-8	AMINOETHYLPIPERAZINE	10.00% - 30.00%	SARA312, TSCA
0000100-51-6	BENZYL ALCOHOL	0.00% - 10.00%	SARA312, TSCA
0002855-13-2	ISOPHORONE DIAMINE	0.00% - 10.00%	SARA312, TSCA
0000112-24-3	TRIETHYLENE TETRAMINE	0.00% - 3.00%	SARA312, TSCA

Product does not contain any chemicals listed under California Proposition 65

SECTION 16) OTHER INFORMATION

Glossary

ACGIH - American Conference of Governmental Industrial Hygienists; CAS - Chemical Abstracts Service ; Chemtrec - Chemical Transportation Emergency Center; DSL - Domestic Substances List; ESL- Effects screening levels; GHS - "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations; HMIS - Hazardous Material Information Service; IATA - Dangerous Goods Regulations (DGR) for the air transport (IATA); IMDG - International Maritime Dangerous Goods Code; LC - Lethal Concentration; LD - Lethal Dose; NFPA - National Fire Protection Association; OEL - Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL - Permissible Exposure Limit; SARA 313 - Superfund Amendments and Reauthorization Act, Section 313; SCBA - Self Contained Breathing Apparatus; ppm - parts per million; STEL - Short-term exposure limit; TLV - Threshold Limit Value; TSCA - Toxic Substances Control Act Public Law 94-469; TWA - Time-weighted average; US DOT- US Department of Transportation.

Version 1.0:

Revision Date: Nov 6, 2023
First Edition.

Full text of H-Statements referred to under Section 3

- H316 Causes mild skin irritation
- H318 Causes serious eye damage
- H319 Causes serious eye irritation
- H314 Causes severe skin burns and eye damage
- H227 Combustible Liquid
- H302 Harmful if swallowed
- H312 Harmful in contact with skin
- H402 Harmful to aquatic life
- H412 Harmful to aquatic life with long lasting effects
- H333 May be harmful if inhaled
- H303 May be harmful if swallowed
- H317 May cause an allergic skin reaction
- H361 Suspected of damaging fertility or the unborn child
- H331 Toxic if inhaled
- H311 Toxic in contact with skin
- H401 Toxic to aquatic life
- H400 Very toxic to aquatic life
- H410 Very toxic to aquatic life with long lasting effects

DISCLAIMER

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