

SAFETY DATA SHEET

According to Regulation (EC) No 1907/2006 (REACH)

1. PRODUCT IDENTIFICATION

Trade Name(s): Geo-Seal EFC Patch – S - Part B (Standard Cure)

Synonyms: N/A

CAS No: N/A

Supplier:

EPRO Services, Inc.

PO Box 347

Derby, KS 67037

800-882-1896 (8:00am – 5:00pm CST)

2. HAZARD(S) IDENTIFICATION

Classification

Acute Aquatic Toxicity – Category 1

Acute Toxicity Dermal – Category 4

Acute Toxicity Oral – Category 4

Chronic Aquatic Toxicity – Category 1

Serious Eye Damage – Category 1

Skin Corrosion – Category 1B

Skin Sensitizer – Category 1B

Specific Target Organ Toxicity – Repeated Exposure – Category 2

Pictograms



Signal Word: Danger

Hazardous Statements – Health: Harmful in contact with skin. Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause damage to organs through prolonged or repeated exposure.

Hazardous Statements – Environmental: Very toxic to aquatic life with long lasting effects.

Precautionary Statements – General: If medical advice is needed, have product container or label at hand. Keep out of reach of children. Read label before use.

Precautionary Statements – Prevention: Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements – Response: Collect spillage. IF ON SKIN: Wash with plenty of water. Call a Poison Center/doctor if you feel unwell. Specific treatment (see section 4 on this SDS). Take off contaminated clothing and wash it before reuse. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. Do not induce vomiting. 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. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water (or shower). Wash contaminated clothing before reuse. If skin irritation or a rash occurs: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Get Medical advice/attention if you feel unwell.

Precautionary Statements – Storage: Store locked up.

Precautionary Statements – Disposal: Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS	Chemical Name	% By Weight
0009046-10-0	Polyoxypropylenediamine	30% - 55%
0000104-40-5	Nonylphenol	22% - 40%
0000100-51-6	Benzyl Alcohol	8% - 16%
Proprietary	Cycloaliphatic Amine	4% - 8%
0002855-13-2	Isophoronediamine	3% - 6%

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

4. FIRST-AID MEASURES

Inhalation: Remove source of exposure or move person to fresh air and keep comfortable for breathing. If exposed/feel unwell/concerned: Call a POISON CENTER/doctor.

Skin Contact: Wash with plenty of lukewarm, gently flowing water and mild soap for 15-20 minutes or until product is removed. If skin irritation or rash occurs: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention.

Eye Contact: Remove source of exposure or move person to fresh air. 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. If eye irritation persists: Get medical advice/attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. If vomiting occurs naturally, lie on your side, in the recovery position. Give 3 or 4 glasses of water to drink and refer person to medical personnel. Do not give anything by mouth to an unconscious person. If exposed or concerned: Get medical advice/attention.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical, foam, carbon dioxide water spray or fog is recommended. Water spray is recommended to cool or protect exposed materials or structures. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam. Sand or earth may be used for small fires only.

Unsuitable Extinguishing Media: If water is used, use a very large quantity of cold water.

Specific Hazards in Case of Fire: Excessive pressure or temperature may cause explosive rupture of containers.

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. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Water may be ineffective but can be used to cool containers exposed to heat or flame. 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. Care should always be exercised in dust/mist areas.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedure: ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Do not touch or walk-through spilled material. Isolate hazard area and keep unnecessary people away. Remove all possible sources of ignition in the surrounding area. Notify authorities if any exposure to the public or the environment occurs or is likely to occur. If spilled material is cleaned up using a regulated solvent, the resulting waste mixture may be regulated.

Recommended Equipment: Appropriate dust or face mask to eliminate breathing foam dust particulates.

Personal Precautions: Avoid breathing vapors. Avoid contact with skin, eyes, or clothing. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing.

Environmental Precautions: Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainagesystems and natural waterways by using sand, earth, or other appropriate barriers.

Methods and Materials for Containment and Cleaning up: Soak up material with absorbent and shovel into a chemical waste container. Cover container, but do not seal, and remove from work area. Residues from spill cleanup may continue to be regulated under provisions of RCRA and require storage and disposal as hazardous waste. For major spills, call EPRO Services, Inc. at 800-882-1896.

7. HANDLING AND STORAGE

General: Wash hands after use. Do not get in eyes, on skin or on clothing. Do not breathe vapors or mists. Use good personal hygiene practices. Eating, drinking, and smoking in work areas is prohibited. Remove contaminated clothing and protective equipment before entering eating areas. Eyewash stations and showers should be available in areas where this material is used and stored. Individuals with existing respiratory disease such as chronic bronchitis, emphysema, or asthma should not be exposed.

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.

Storage Room Requirements: Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight, and incompatibilities. Store in approved containers and protect against physical damage. Keep containers securely sealed when not in use. Indoor storage should

meet OSHA standards and appropriate fire codes. Containers that have been opened must be carefully resealed to prevent leakage. Empty containers retain residue and may be dangerous. Store in tightly sealed containers to protect from atmospheric moisture. Store in a cool dry area. Store liquid in containers above ground and surround by dikes to contain spills or leaks. Do not cut, drill, grind, weld, or perform similar operations on or near containers.

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. If additional protection is needed for entire face, use in combination with a face shield.

Skin Protection: 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 is recommended to avoid skin sensitization. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. 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 and ANSI Z88.2 should be followed. Check with respiratory protective equipment suppliers. In poorly ventilated areas, a cartridge mask NIOSH approved for organic vapors is recommended under the following conditions: emergency situations, when product vapor concentration is greater than 20 ppm for a period longer than 15 min. during repair and cleaning of equipment, during transfer or discharge of the product.

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

Chemical Name	OSHA TWA (ppm)	OSHA TWA (mg/m ³)	OSHA STEL (ppm)	OSHA STEL (mg/m ³)	OSHA Tables (Z1, Z2, Z3)	OSHA Carcinogen	OSHA Skin designation	NIOSH TWA (ppm)
No applicable chemical	-	-	-	-	-	-	-	-

Chemical Name	NIOSH TWA (mg/m ³)	NIOSH STEL (PPM)	NIOSH STEL (mg/m ³)	NIOSH Carcinogen	ACGIH TWA (ppm)	ACGIH TWA (mg/m ³)	ACGIH STEL (ppm)	ACGIH STEL (mg/m ³)
No applicable chemical	-	-	-	-	-	-	-	-

Chemical Name	ACGIH Carcinogen	ACGIH TLV Basis	ACGIH Notations
No applicable chemical	-	-	-

9. PHYSICAL AND CHEMICAL PROPERTIES

Density: 8.09 lb/gal

VOC Regulatory: 0.00 lb/gal

Specific Gravity: .97

VOC Part A & B Combined: N.A.

Appearance: Liquid
Odor Description: Amine-like
Water Solubility: N.A.
Flash Point Symbol: N.A.
Viscosity: N.A.
Upper Explosion Level: N.A.
Vapor Density: Heavier than air
Melting Point: N.A.
High Boiling Point: N.A.
Decomposition Pt: N.A.
Coefficient Water/Oil: N.A.

Odor Threshold: N.A.
pH: N.A.
Flammability: N.A.
Flash Point: 110°C
Lower Explosion Level: N.A.
Vapor Pressure: N.A.
Freezing Point: N.A.
Low Boiling Point: 150°C
Auto Ignition Temp: N.A.
Evaporation Rate: Slower than ether

10. STABILITY AND REACTIVITY

Stability: Material is stable at standard temperature and pressure.

Conditions to Avoid: Heat, high temperature, open flame, sparks, and moisture. Contact with incompatible materials in a closed system will cause buildup of pressure.

Hazardous Reactions/Polymerization: Will not occur.

Incompatible Materials: This product will react with epoxies, isocyanates, and strong oxidizing agents. Some reactions can be violent.

Hazardous Decomposition Products: Combustion products: organic vapors and thermal decomposition fragments.

11. TOXICOLOGICAL INFORMATION

Skin Corrosion/Irritation: Causes severe skin burns and eye damage.

Serious Eye Damage/Irritation: Causes serious eye damage. Any contact should not be left untreated. 0000100-51-6 Benzyl Alcohol. Contact with eyes causes local irritation.

Respiratory/Skin Sensitization: Exposure may cause mucous membrane and respiratory tract irritation, tightness of chest, headache, shortness of breath, and a dry cough. The effects of acute exposure may be delayed in onset up to 12-24 hours. Repeated exposure above current occupational limits may cause an allergic sensitization of the respiratory tract. This is characterized by an asthma-like response upon re-exposure to the chemical. The symptoms may include coughing, wheezing, shortness of breath and chest tightness. May cause an allergic skin reaction.

Carcinogenicity: No data available.

Germ Cell Mutagenicity: No data available.

Reproductive Toxicity: No data available.

Specific Target Organ Toxicity - Single Exposure: No data available.

Specific Target Organ Toxicity - Repeated Exposure: Repeated exposure generally aggravates the following medical conditions: Cardiovascular disease and Chronic respiratory disease. May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard: No data available.

Acute Toxicity: Ingestion: Irritation or chemical burns of the mouth, pharynx, esophagus, and stomach can develop following ingestion, and injury may be severe and cause death. Harmful in contact with skin. Harmful if swallowed.

Likely Routes of Exposure: 0000100-51-6 Benzyl Alcohol. The substance can be absorbed into the body by inhalation of its vapor 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 kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen 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 kislorod sodergashie organicheskie soedinenia". (Hazardous substances. Galogen 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

0009046-10-0 POLYOXYPROPYLENEDIAMINE

LD50 (dermal, rabbit): 2090 mg/kg (based on raw material SDS)

LD50 (oral, rat): 480 mg/kg (based on raw material SDS)

0002855-13-2 ISOPHORONEDIAMINE

LD50 (rat, oral): 1,030 mg/kg (based on raw material SDS)

12. ECOLOGICAL INFORMATION (non-mandatory)

Toxicity: Very toxic to aquatic life with long-lasting effects.

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

Bioaccumulative Potential: 0000100-51-6 Benzyl Alcohol. No potential for bioaccumulation.

Persistence and Degradability: 0000100-51-6 Benzyl Alcohol. Readily biodegradable.

Results of the PBT and vPvB assessment: 0000100-51-6 Benzyl Alcohol. The substance is not PBT/vPvB.

13. DISPOSAL CONSIDERATIONS (non-mandatory)

Waste Disposal: Under RCRA, it is the responsibility of the user of the product, to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, 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 purpose. Return drums to reclamation centers for proper cleaning and reuse.

14. TRANSPORT INFORMATION (non-mandatory)

U.S. DOT Information

UN/NA #: 2735

UN Proper Shipping Name: Amines, Liquid, Corrosive, N.O.S. (Polyoxypropylenediamine))

Hazard Class: 8

Packing Group: III

Placard: Corrosive

IMDG Information

UN/NA #: 2735

UN Proper Shipping Name: Amines, Liquid, Corrosive, N.O.S. (Polyoxypropylenediamine))

Hazard Class: 8

Packing Group: III

Placard: Corrosive

Marine Pollutant: Yes

IATA Information

UN/NA #: 2735

UN Proper Shipping Name: Amines, Liquid, Corrosive, N.O.S. (Polyoxypropylenediamine))

Hazard Class: 8

Packing Group: III

Placard: Corrosive

15. REGULATORY INFORMATION (non-mandatory)

CAS	Chemical Name	% By Weight	Regulation List
0009046-10-0	POLYOXYPROPYLENEDIAMINE	30% - 55%	DSL,SARA312,TSCA
0000104-40-5	NONYLPHENOL	22% - 40%	DSL,SARA312,TSCA
0000100-51-6	BENZYL ALCOHOL	8% - 16%	DSL,SARA312,VOC,TSCA
0002855-13-2	ISOPHORONEDIAMINE	3% - 6%	DSL,SARA312,VOC,TSCA

16. OTHER INFORMATION

OTHER INFORMATION: Note: As per GHS, category 1 is the greatest level of hazard within each class.

GLOSSARY: ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; CA Prop65- California Proposition 65; Canadian TDG- Canadian Transportation of Dangerous Goods; CAS- Chemical Abstract Service; CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL- Effects screening levels; HMIS- Hazardous Material Information Service; 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 (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self-Contained Breathing Apparatus; STEL- Short Term Exposure Limit; TCEQ- Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA- Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

This information provided on 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 designated only as a guide for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered as 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 material or in any process, unless specified in the text.