

Section 1. Identification

Product Name: ScarGuard E Resin – Part A
Supplier: CSNRI | 621 Lockhaven Drive. Houston, TX 77073 | +1 281.590.8491
Emergency Phone Number: 800.424.9300 (CHEMTREC)
 +1 703.741.5970 (Outside the US)
Product Description: Epoxy resin
Product Use: Intended to repair pipes
Chemical Name or Synonym: N/A

Section 2. Hazards identification
Classification of the substance or mixture:

Skin corrosion/irritation – Category 2
 Eye damage/eye irritation – Category 2
 Skin sensitization - Category 1
 Chronic Aquatic Toxicity – Category 2

Label Elements:

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

Signal Word: Warning

Precautionary Statement:

P362 - Take off contaminated clothing and wash before reuse
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P273 - Avoid release to the environment

Other information: None known

Section 3. Composition/ Information on Ingredients

Substances: N/A

Mixture:

Chemical Name	CAS-No	Weight %
Phenol-formaldehyde polymer, glycidyl ether	28064-14-4	40 – 60
Bisphenol A/epichlorohydrin epoxy resin	25068-38-6	45 – 65
Propane 2,2 bis[p-2,3 epoxypropoxy]phenyl]-polymers	25085-99-8	< 3

**Section 4. First Aid Measures****First Aid Measures for Accidental:**

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Skin Contact: Remove contaminated clothing. Wipe excess from skin. Lather with waterless skin cleaner and then wash with warm soap and water. If irritation occurs, get medical attention.

Ingestion: Do not induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

Inhalation Move to fresh air. If symptoms persist, call a physician.

Most important symptoms/effects, acute and delayed: Itching. Rashes. Serious eye irritation or damage.

Indication of immediate medical attention and special treatment needed: Treat symptomatically.

Section 5. Fire Fighting Measures

Extinguishing Media: Carbon dioxide, foam, dry chemical, water fog.

Special Fire Fighting Procedures: Wear complete fire fighting gear and self-contained breathing apparatus to protect against potential harmful and/or irritating fumes. Use water to keep fire exposed containers cool. Do not use high volume water jet on the fire as this may spread the area of the fire.

Special Protective Equipment for Fire-fighters: Use personal protective equipment. Wear self contained breathing apparatus for firefighting if necessary.

Unusual Fire and Explosion Hazard: Closed containers exposed to extreme heat may rupture.

Hazardous Decomposition Materials (Under Fire Conditions): Combustion products may include, but are not limited to: phenolics, carbon monoxide, carbon dioxide.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Isolate area. Keep unnecessary and unprotected personnel from entering the involved area. Avoid contact with eyes, skin and clothing. Use gloves and safety glasses. Prevent contamination of soil and water.

Cleanup and Disposal of Spill: Stop leak without additional risk. Dike and absorb with inert absorbent material (e.g., sand) and collect in a suitable, closed and labeled container. Wash the spill area with water and detergent. Dispose of in accordance with applicable local and federal environmental control regulations.

Section 7. Handling and Storage

Precautions for Safe Handling: Ventilate work area. Avoid skin contact. Skin contact with hot material may cause thermal burns. Wash skin thoroughly after handling. Launder contaminated clothing before reuse or discard. Never apply a direct flame to any container of product.

Conditions for safe storage including any incompatibilities: Store in a cool, dry place with adequate ventilation. Keep in original containers. Store in tightly closed containers to prevent moisture absorption and loss of volatiles. Store away from heat and open flame.

Section 8. Exposure Controls / Personal Protection

Exposure Guidelines: None established.

Appropriate Engineering Controls: Ventilation must be adequate for most operations.

**Personal Protective Equipment:**

Respiratory Protection: In case of inadequate ventilation wear respiratory protection. Use respirators when exposure to vapors from heated material.

Eye / Face Protection: Wear safety glasses with side shields or chemical splash goggles when exposure is more likely.

Skin Protection: Wear liquid-proof, chemical resistant gloves (nitrile-butyl rubber, neoprene, butyl rubber or natural rubber) and full body-covering clothing.

Additional protective measures: Wash thoroughly after handling. Avoid breathing vapors from heated material. Protective skin cream barriers can be applied to hands in addition to gloves for added protection.

Section 9. Physical and Chemical Properties

Physical Appearance:	Bright Yellow
Odor:	Mild
Odor Threshold:	No data available
pH:	No data available
Flash Point:	218 °C
Melting Point Range:	No applicable
Boiling point:	No data available
Evaporation rate (ether=1):	No data available
Flammability (solid, gas):	No data available
Flammability Limits in Air:	Not established for this product
Viscosity:	29,000 cPs at 75 °F (Rheometer Method)
Water Solubility:	Insoluble
Solubility in other solvents:	No data available
Vapor Pressure:	No data available
Vapor density (Air=1)	No data available
Relative Density:	1.15
Partition coefficient (n-octanol/water):	No data available
Auto-ignition Temperature:	No data available
Decomposition Temperature:	No data available

Section 10. Stability and Reactivity

Reactivity: Stable

Chemical Stability: Stable under standard normal conditions.

Possibility of Hazardous reactions: None under normal processing. Hazardous polymerization will not occur by itself.

Conditions to Avoid: To avoid thermal decomposition, do not overheat. Incompatible products.

Incompatible Materials / Chemicals: Acids. Bases. Strong acids. Strong oxidizing agents. Reacts with amines.

Hazardous Decomposition Products: Uncontrolled exothermic reaction of epoxy resin releases carbon monoxide, carbon dioxide, aldehydes.

Section 11. Toxicological Information

Numerical measures of toxicity:

For Bisphenol A/epichlorohydrin epoxy resin

Acute Oral Toxicity: LD50 (rat): > 5,000 mg/kg

Acute Dermal Toxicity: LD50 (rabbit): 20,000 mg/kg



For Phenol-formaldehyde polymer, glycidyl ether

Acute Oral Toxicity: LD50 (rat): > 2,000 mg/kg

Acute Dermal Toxicity: LD50 (rabbit): 2,000 mg/kg

Information on the likely route of exposure:

Eye contact: May cause eye irritation. Corneal injury is unlikely.

Skin contact: Prolonged contact may cause skin irritation with local redness.

Inhalation: No known effect.

Ingestion: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available

Delayed and immediate effects and also chronic effects from short and long term exposure:

Short term exposure: No specific data.

Long term exposure: No specific data

Section 12. Ecological Information

Ecotoxicity Effects:

Data for components:

Bisphenol A/epichlorohydrin epoxy resin

Acute LC50 (daphnia magna): 1.3 mg/L

Acute LC50 (fathead minnow): 3.1 mg/L

Phenol-formaldehyde polymer, glycidyl ether

Acute EC50 (daphnia magna): 3.5 mg/L

Acute LC50 (Leuciscus idus): 5.7 mg/L

Propane 2,2 bis[p-2,3 epoxypropoxy]phenyl]-polymers: Material is moderately toxic to aquatic organisms on an acute basis

(LC50/EC50 between 1 and 10 mg/L in the most sensitive species tested).

Fish Acute & Prolonged toxicity: For similar material: LC50, Oncorhynchus mykiss (rainbow trout), semi-static test, 96h: 2 mg/l

Aquatic Invertebrate Acute Toxicity: EC50, Daphnia (water flea), static test 48h, immobilization; 1.8 mg/l

Aquatic Plant Toxicity: ErC50, Scenedesmus capricornutum (fresh water algae), static test, Growth rate inhibition, 72h: 11 mg/l

Toxicity to Microorganisms: IC50; bacteria, 18h: >42.6 mg/l

Aquatic Invertebrate Chronic Toxicity Value: Daphnia magna (water flea), semi-static test, 21d, NOEC: 0.3mg/l.

Persistence and degradability:

Propane 2,2 bis[p-2,3 epoxypropoxy]phenyl]-polymers: Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

OECD Biodegradation Tests:

Biodegradation	Exposure Time	Method	10 Day Window
12%	28d	OECD 302B Test	Not applicable

Bioaccumulative potential: Bioconcentration potential is moderate.

Mobility in soil: No information available.

Other adverse effects: No information available.



Section 13. Disposal Considerations

Waste treatment methods: Do not dump to ground, sewers or watercourses. Dispose of at a licensed waste disposal facility utilizing methods that are in compliance with all applicable federal, state and local laws regulations. Waste characterization and compliance with applicable laws are the responsibility solely of the waste generator.

Uncleaned packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14. Transport Information

DOT (Department of Transportation): Not regulated

IMDG (Sea)

Proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (Bisphenol A Epoxy Resin)

UN number: 3082

Hazard Class: 9

Packing group: III

IATA / ICAO (Air)

Proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (Bisphenol A Epoxy Resin)

UN number: 3082

Hazard Class: 9

Packing group: III

ADR / RID (Rail)

Proper shipping name: Environmentally Hazardous Substance, Liquid, N.O.S. (Bisphenol A Epoxy Resin)

UN number: 3082

Hazard Class: 9

Packing group: III

Section 15. Regulatory Information

SARA Title III Section 311/312 (40CFR370): Acute health hazard

SARA Title III Section 313 (40CFR372): No reportable components

CERCLA Status (40CFR302): No reportable quantity components

OSHA/NTP/IARC Carcinogen status: Not listed.

TSCA Status: All components are listed on TSCA Inventory or otherwise comply with TSCA requirements.

Canada WHMIS Classification: D2B

Chemicals known to the State of California to cause Cancer or Reproductive Toxicity: This product contains trace amounts of Epichlorohydrin CAS 106-89-8

Hazardous Products Act Information: This product contains the following ingredients which are Controlled Product and/or are on the Ingredient Disclosure List (Canadian HPA Section 13 and 14):

Propane 2,2 bis[p-2,3 epoxypropoxy]phenyl]-polymers, CAS#: 25085-99-8

Section 16. Other Information

Key Legend Information:

N/A – Not Applicable



OSHA – Occupational Safety and Health Administration
ACGIH – Association Advancing Occupational and Environmental Health
CAS- Chemical Abstract Service
HMIS- Hazardous Material Information Service
NFPA – National Fire Protection Association
SARA (Title III)- Superfund Amendments and Reauthorization Act;
WHMIS- Workplace Hazardous Materials Information System.

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