



ESN-330

Section 1. Product and Company Identification

Product Name: ESN-330
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 putty
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
 Serious eye damage/eye irritation – Category 2A
 Skin sensitization - Category 1
 Hazardous to the Aquatic Environment – Long Term Hazard – Category 2

Label Elements:



Hazard Statements:

H315 Causes skin irritation.
 H319 Causes serious eye irritation
 H317 May cause an allergic skin reaction
 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
 P391 - Collect spillage

Section 3. Composition/ Information on Ingredients

Chemical Name	CAS-No	Weight %
Bisphenol A - Epichlorohydrin polymer	25068-38-6	10 – 30
Crystalline silica non-respirable	14808-60-7	0.1-1

Note: This product contains no additional hazardous ingredients according to GHS regulations.

Section 4. First Aid Measures

**First Aid Measures for Accidental:**

General Advice: If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

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: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Remove material from skin immediately. In the case of skin irritation or allergic reactions see a physician.

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.

Protection of First aiders: Use personal protective equipment. Avoid contact with skin, eyes and clothing

Most important symptoms/effects, acute and delayed:

Most Important Symptoms/Effects: Hives. Itching. Rashes. Eye irritation/reactions. Skin irritation

Notes to Physician: May cause sensitization of susceptible persons. Treat symptomatically

Section 5. Fire Fighting Measures

Suitable Extinguishing Media: Water fog. Carbon dioxide (CO₂). Foam. Dry chemical.

Unsuitable Extinguishing Media: No information available.

Special hazards arising from the chemical: May cause sensitization by skin contact. Thermal decomposition can lead to release of irritating gases and vapors. Carbon oxides

Special protective equipment and precautions for fire-fighters: As in any fire, wear self-contained breathing apparatus and full protective gear.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Avoid contact with skin, eyes and clothing. Use personal protective equipment. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

Environmental precautions: Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Avoid release to the environment.

Methods and materials for containment and cleaning up: Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. After cleaning, flush away traces with water.

Section 7. Handling and Storage

Precautions for safe handling: Handle in accordance with good industrial hygiene and safety practice. Do not breathe vapors or spray mist. Use only in area provided with appropriate exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Do not take internally.

Conditions for safe storage including any incompatibilities: Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep in properly labeled containers. When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning of equipment, work area and clothing. Wash thoroughly after handling.



Section 8. Exposure Controls / Personal Protection

Control Parameters (Exposure Limits):

Component	Exposure Limits		
	ACGIH-TLV	NIOSH	OSHA-PELs
Silica, crystalline quartz	TLV 0.025 mg/m ³ (TWA respirable)	0.05mg/m ³ (respirable dust)	30 mg/m ³ TWA (total dust) 10 mg/m ³ TWA (respirable)

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment:

Eye Protection: Safety glasses with side-shields. Risk of contact: Tightly fitting safety goggles.

Skin and Body Protection: Impervious clothing.

Hand Protection: Impervious gloves.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Environmental Exposure Controls: Do not allow material to contaminate ground water system.

Section 9. Physical and Chemical Properties

Physical State:	Paste
Colour:	Light brown putty
Odour:	Sulfur/pungent.
Melting Point/Freezing Point:	No data available
Boiling point:	No data available
Flammability (solid, gas):	No data available
Lower and Upper Explosion limits/ Flammability Limits:	Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge
Flash Point:	>199.9 °F
Auto-ignition Temperature:	No data available
Decomposition Temperature:	>428 °F (>220 °C)
pH:	No data available
Kinematic Viscosity:	No data available
Solubility:	Easily soluble in the following materials: methanol and acetone. Insoluble in the following materials: cold water and hot water.
Evaporation rate (ether=1):	No data available
Flammability Limits in Air:	No data available
Solubility in other solvents:	No data available
Partition coefficient (n-octanol/water):	No data available
Vapor Pressure:	No data available
Density and/or Relative Density:	1.947
Relative Vapour Density:	No data available
Particle Characteristics:	No data available

Section 10. Stability and Reactivity

Reactivity: Not data available



Chemical Stability: Stable under standard normal conditions.

Possibility of Hazardous reactions: None under normal processing.

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

Incompatible Materials / Chemicals: Acids. Bases. Amines. Strong oxidizing agents.

Hazardous Decomposition Products: Phenols. Carbon monoxide (CO), carbon dioxide (CO₂).

Section 11. Toxicological Information

Information in the likely route of exposure:

Potential Acute Health Effects:

Inhalation: No known effect.

Eye Contact: Irritating to eyes. Causes serious eye irritation.

Skin Contact: Irritating to skin. Causes skin irritation. May cause allergic skin reaction

Ingestion: May be harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics:

Sensitization: May cause sensitization of susceptible persons. May cause sensitization by skin contact.

Mutagenic Effects: No information available.

Carcinogenic Effects: No information available.

Reproductive Toxicity: No information available.

Developmental Toxicity: No information available.

STOT - single exposure: No information available.

STOT - repeated exposure: No information available.

Target Organ Effects: Eyes. Respiratory system.

Aspiration Hazard: No information 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

Numerical measures of toxicity

Acute toxicity:

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Bisphenol A – Epichlorohydrin polymer	11,400 mg/kg (rat)	-	-

Section 12. Ecological Information

Ecotoxicity Effects: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Persistence and degradability: No information available

Bioaccumulative potential:

Component	LogPow	BCF	Potential
Bisphenol A (epichlorohydrin)	2.64 to 3.78	31	low

Mobility in soil: No available

Other adverse effects: No information available

**Section 13. Disposal Considerations**

Waste treatment methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Uncleaned packaging: Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport Information

DOT : Not regulated

IATA

UN-Number: UN3082

Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A - Epichlorohydrin polymer)

Hazard Class: 9

Packing Group: III

IMDG/IMO

UN-Number: UN3082

Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Bisphenol A - Epichlorohydrin polymer)

Hazard Class: 9

Packing Group: III

Environmental hazard: Yes

Special Provisions: None.

EmS No.: F-A, S-F

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: No information available.

Section 15. Regulatory Information

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

Federal Regulations:

TSCA: All components are listed or exempted.

International Regulations:

Canada inventory: All components are listed or exempted.

**Section 16. Other Information****Key Legend Information:**

OSHA – Occupational Safety and Health Administration

NIOSH – National Institute for Occupational Safety and Health

ACGIH – American Conference of Governmental Industrial Hygienists

OSHA – Occupational Safety and Health Administration

TLV – Threshold Limit Value

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