

SAFETY DATA SHEET



Date Issued : 3/27/2014
SDS No : 125195

Pipe-Lining Epoxy Curing Agent: EL-508-B5

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Pipe-Lining Epoxy Curing Agent: EL-508-B5
GENERAL USE: Polyamide, Amine Type Epoxy Curing Agent for Coating
PRODUCT CODE: 125195

MANUFACTURER

Infrastructure Repair Systems, Inc.
4301 A 34th Street North
St. Petersburg, FL 33714
Emergency Phone: 1-800-255-3924
Customer Service: 1-877-327-4216
E-Mail: <http://www.irsi.net/>

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Irritation, Category 2
Eye Irritation, Category 2
Skin Sensitization, Category 1
Acute Toxicity (Inhalation), Category 5
Acute Toxicity (Dermal), Category 4

Environmental:

Aquatic Toxicity (Acute), Category 2

GHS LABEL



Exclamation
mark

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H315: Causes skin irritation.
H319: Causes serious eye irritation.
H317: May cause an allergic skin reaction.
H333: May be harmful if inhaled.
H312: Harmful in contact with skin.
H401: Toxic to aquatic life.

PRECAUTIONARY STATEMENT(S)**Prevention:**

P280: Wear protective gloves/protective clothing/eye protection/face protection.
 P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
 P264: Wash thoroughly after handling.
 P273: Avoid release to the environment.

Response:

P302+P352: IF ON SKIN: Wash with plenty of soap and water.
 P333+P313: If skin irritation or rash occurs: 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.
 P337+P313: If eye irritation persists: Get medical advice/attention.
 P304+P312: IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
 P362: Take off contaminated clothing and wash before reuse.
 P321: Specific treatment (see Section 4: First Aid).

Disposal:

P501: Dispose of contents/container in accordance with all Federal, State, and local regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Amber to Red colored syrup

IMMEDIATE CONCERNS: Material will be irritating to both the eyes and skin, fumes may cause headache and nausea.

POTENTIAL HEALTH EFFECTS

EYES: Severe eye irritation.

SKIN: Causes skin irritation.

INGESTION: Minimal risk from ingestion during normal industrial use.

INHALATION: May cause nose, throat, and lung irritation. Inhalation of vapors and or aerosols in high concentrations may cause irritation of the respiratory system.

CARCINOGENICITY: This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater.

MEDICAL CONDITIONS AGGRAVATED: Liver disorders (such as jaundice or liver enlargement). Kidney disorders (such as edema, or proteinuria). Asthma. Adverse respiratory effects (such as cough, tightness of chest or shortness of breath). Skin disorders and Allergies. Adverse skin effects (such as rash, irritation or corrosion). Adverse eye effects (such as conjunctivitis or corneal damage). Eye disease

ROUTES OF ENTRY: Skin, Inhalation, Eyes

TARGET ORGAN STATEMENT: Respiratory system. Skin. Eyes. Kidney. Liver. Pancreas. Spleen.

IRRITANCY: Repeated and/or prolonged exposure to low concentrations of vapors and/or aerosols may cause: Sore throat.

SENSITIZATION: Repeated or prolonged contact causes sensitization, asthma and eczemas.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
TETA reaction products with Phenol / Formaldehyde	> 33	32610-77-8
Phenol	10	108-95-2
Triethylenetetramine	< 14	112-24-3
Polyamide Resin (Trade Secret)	12 - 24	N/A
Benzyl Alcohol	6 - 16	100-51-6
Mixed Cycloaliphatic Amines	4 - 12	N/A
Tertiary Amine	1 - 3	N/A
Organic Acid	0.5	N/A

COMMENTS: The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses. If irritation persists seek immediate medical attention.

SKIN: Wash off immediately with plenty of water for at least 20 minutes. Immediately remove contaminated clothing, and any extraneous chemical, if possible to do so without delay. Take off contaminated clothing and shoes immediately.

INGESTION: Aspiration hazard. If swallowed, Do NOT induce vomiting. If vomiting occurs, keep head below hips to prevent aspiration into lungs. Rinse mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately.

INHALATION: If breathing has stopped or is labored, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately. Move to fresh air.

ADDITIONAL INFORMATION: Application of corticosteroid cream has been effective in treating skin irritation.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Not categorized as Flammable by GHS standards.

GENERAL HAZARD: Downwind personnel must be evacuated. Burning produces noxious and toxic fumes.

EXTINGUISHING MEDIA: Alcohol-resistant foam. Carbon dioxide (CO₂). Dry chemical. Dry sand. Limestone powder.

HAZARDOUS COMBUSTION PRODUCTS: May form Ammonia gas, oxides of Carbon and Nitrogen, Noxious and Toxic fumes.

FIRE FIGHTING PROCEDURES: Evacuate any non-essential personnel. Extinguish all ignition sources if safe to do so. Use water to cool exposed containers and structures until fire is out. Avoid spreading burning material with water used for cooling purposes.

FIRE FIGHTING EQUIPMENT: Full Bunker gear(helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure, NIOSH approved, self-contained breathing apparatus (SCBA).

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Use self-contained breathing apparatus and chemically protective clothing. Wear suitable protective clothing, gloves and eye/face protection. Evacuate personnel to safe areas.

LARGE SPILL: Follow procedure for small spills. Dike ahead of spill to contain material. Water mist may be used to disperse vapors. Notify proper authorities if the spill cannot be contained. Follow Federal, State, and local regulations for disposal.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Construct a dike to prevent spreading.

GENERAL PROCEDURES: Always ensure proper ventilation from any spill. Respirators or SCBA are required if permissible exposure limits are exceeded due to inadequate general ventilation. All spills should be contained as best as possible. All chemical spills should be assumed to be hazardous to the environment to ensure safety.

7. HANDLING AND STORAGE

HANDLING: Do not use sodium nitrite or other nitrosating agents in formulations containing this product. Suspected cancer-causing nitrosamines could be formed. Emergency showers and eye wash stations should be readily accessible. Adhere to work practice rules established by government regulations. Avoid contact with eyes. Use personal protective equipment. When using, do not eat, drink or smoke.

STORAGE: Do not store near acids. Keep away from alkalis. Store in steel containers preferably located outdoors, above ground, and surrounded by dikes to contain spills or leaks. Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³
Phenol	TWA	5	19	5	19
Triethylenetetramine	TWA	1	6		
Benzyl Alcohol	TWA	10	44		

ENGINEERING CONTROLS: Provide ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (PEL/TLV). Any installed emergency eye wash station or safety showers should be located near the work area.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical splash goggles and/or face shield. Always use proper eye protection around the work area.

SKIN: Butyl-rubber, Nitrile rubber. Neoprene gloves. Impervious gloves. PVC disposable gloves. The breakthrough time of the selected glove(s) must be greater than the intended use period.

RESPIRATORY: Vapor respirator may be required if exposure limits are exceeded. Use a NIOSH approved respirator or equivalent when required. Proper mechanical ventilation should be installed to ensure the exposure levels are below the allowable thresholds (PEL/TLV).

PROTECTIVE CLOTHING: Long sleeve shirts and trousers without cuffs. Impervious clothing.

WORK HYGIENIC PRACTICES: Never eat or drink in areas where the chemical is being used. Wash hands after handling to limit exposure.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid.

ODOR: Sharp Amine odor.

ODOR THRESHOLD: No data available.

APPEARANCE: Amber colored syrup

pH: 10

PERCENT VOLATILE: No data available.

FLASH POINT AND METHOD: 92°C (196°F) Closed Cup

FLAMMABLE LIMITS: No data available.

AUTOIGNITION TEMPERATURE: No data available.

VAPOR PRESSURE: ~ 3 mm Hg @ 20 C

VAPOR DENSITY: No data available.

BOILING POINT: > 177°C (351°F)

FREEZING POINT: No data available.

MELTING POINT: No data available.

SOLUBILITY IN WATER: Slightly soluble

EVAPORATION RATE: No data available.

DENSITY: No data available.

SPECIFIC GRAVITY: 1.05 (Water = 1)

VISCOSITY: No data available.

(VOC): No data available.

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: This product is stable under normal conditions of storage and use.

CONDITIONS TO AVOID: Avoid all unplanned contact with strong reactive chemicals including Acids, Bases, Oxidizers and Amines

HAZARDOUS DECOMPOSITION PRODUCTS: Nitric acid. Ammonia Nitrogen oxides (NO_x). Nitrogen oxide can react with water vapors to form corrosive nitric acid. Carbon monoxide. Carbon dioxide(CO₂). Aldehydes Flammable hydrocarbon fragments. Organic acid vapors. Nitrosamine.

INCOMPATIBLE MATERIALS: Organic acids (i.e. acetic acid, citric acid etc.). Mineral acids. Product slowly corrodes copper, aluminum, zinc and galvanized surfaces. Reactive metals (e.g. sodium, calcium, zinc etc.). Materials reactive with hydroxyl compounds. CAUTION! N-Nitrosamines, many of which are known to be potent carcinogens, may be formed when the product comes in contact with nitrous acid, nitrites or atmospheres with high nitrous oxide concentrations. Nitrous acid and other nitrosating agents. Oxidizing agents.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Phenol	410 to 650 mg / kg	630 mg / kg	900 mg/L (8h)
Triethylenetetramine	2500 mg / kg (Rat)	550 mg/kg (Rabbit)	
Benzyl Alcohol	1230 mg / kg (Rat)	2000 mg/kg (Rabbit)	> 4.178 mg/L (4h) aerosol (Rat)
Mixed Cycloaliphatic Amines		> 1000 mg / kg	
Tertiary Amine		1242 mg / kg (dermal Rabbit)	

NOTES: No data is available on the product itself.

EYE EFFECTS: Eye irritant

SKIN EFFECTS: Skin Irritant, Sensitizer.

CHRONIC: Results from a battery of short term genotoxicity tests on this material or its components indicate mutagenic activity. Absorption of phenolic solutions through the skin may be very rapid and can cause damage to the kidneys, liver, pancreas and spleen, and edema of the lungs.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION: Do NOT discharge into sewers or waterways.

BIOACCUMULATION/ACCUMULATION: Low bioaccumulation potential.

AQUATIC TOXICITY (ACUTE):

Benzyl alcohol: LC50 (96 h) : 10 mg/l Species : Bluegill

Phenol : EC50 (48 h) : 4-7 mg/l Species: Daphnia

Benzyl alcohol : LC50 (72 h) : 700 mg/l Species: Algae

Notes: No data is available on the product itself.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal should be in accordance with all Federal, State, and local regulations. Empty containers may still be considered dangerous due to residual vapors/liquid/dust.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not Regulated by DOT

AIR (ICAO/IATA)

SHIPPING NAME: Not Dangerous Goods

VESSEL (IMO/IMDG)

SHIPPING NAME: Not Dangerous Goods

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Immediate (acute) Health Hazard, Chronic (Delayed) Health Hazard.

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** Yes

313 REPORTABLE INGREDIENTS: Phenol

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Not Listed.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All items are TSCA listed

CALIFORNIA PROPOSITION 65: This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

OSHA HAZARD COMM. RULE: Irritant. Sensitizer.

CANADA

WHMIS CLASS: Class D-2A: Very toxic material causing other toxic effects
 Class D-2B: Toxic material causing other toxic effects

DOMESTIC SUBSTANCE LIST (INVENTORY): All components are listed.

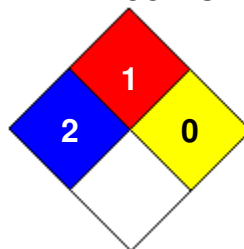
16. OTHER INFORMATION

PREPARED BY: BC

HMIS RATING

HEALTH	*	2
FLAMMABILITY		1
PHYSICAL HAZARD		0
PERSONAL PROTECTION		<input type="text"/>

NFPA CODES



HMIS RATINGS NOTES: The customer is responsible for determining the PPE code for this material.

MANUFACTURER DISCLAIMER: This information is compiled from sources believed reliable as of the date of issue, it is provided in good faith and correct to the best of our knowledge. No warranty, guarantee, or representation is made as to the sufficiency of the information for the safe use of the product nor to relieve the end user of their own Federal, State, and Local regulatory compliance requirements.