

Section 1. Identification of the substance/mixture and of the company/undertaking

Product ID: LSKA-400 (Part A)
Product Name: Epoxy steel putty resin
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: For industrial purposes only.

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

Specific Target Organ Toxicity - Repeated Exposure - Category 2

Skin Irritation - Category 2

Skin Sensitizer - Category 1

Carcinogenicity - Category 2

Eye Irritation - Category 2

Chronic aquatic toxicity - Category 2

Acute aquatic toxicity - Category 2

Label Elements:

Signal word: Warning

Hazard statements:

H371 - May cause damage to organs through prolonged or repeated exposure.

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H351 - Suspected of causing cancer.

H319 - Causes serious eye irritation

H401 - Toxic to aquatic life

H411 - Toxic to aquatic life with long lasting effects

Precautionary statement:

P261 - Avoid breathing dust/fume / gas / mist / vapours / spray.

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

P273 - Avoid release to the environment.

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

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

P321 - P333+P313 - If skin irritation or rash occurs: Get medical advice /attention.

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

P403 - Store in a well-ventilated place.

P410 - Protect from sunlight.

P420 - Store separately.

P501 - Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

Other information: None known

Section 3. Composition/ Information on Ingredients

Substances:

Component	CAS #	Weight %
Iron	7439-89-6	30 – 70
Epoxy resin,	Proprietary	20 – 50
Silica crystalline	14808-60-7	5 – 15
Calcium silicate	Proprietary	1 – 10
Aluminium	7429-90-5	1 – 5
Carbon black	1333-86-4	0.2 – 2
Titanium dioxide	Proprietary	Trace

Section 4. First Aid Measures

First Aid Measures for Accidental:

Ingestion: If swallowed, do not induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person. Rinse mouth with water.

Inhalation: Remove to fresh air and seek medical attention. In case of unconsciousness place patient stably inside position for transportation.

Skin Contact: Flush contaminated skin with plenty of soap and water for 15 to 20 minutes, remove contaminated shoes and clothing. Consult physician if symptoms develop.

Eye Contact: Flush with plenty of water for at least 20 minutes. Check for and remove any contact lenses. Call a doctor immediately.

Most important symptoms/effects, acute and delayed: No further relevant information available.

Indication of immediate medical attention and special treatment needed: No further relevant information available.

Section 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.

Unsuitable extinguishing media: Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

Special hazards arising from the substance or mixture: No further relevant information available.

Hazardous Decomposition Materials (Under Fire Conditions): Hazardous decomposition products formed under fire conditions.

Special Protective Equipment and Precautions for Fire Fighters: Firefighters use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Protective clothing and respiratory protective device.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: 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 general public or the environment occurs or is likely to occur. Cover the liquid with inert absorbent. Scoop all contaminated material into containers for proper disposal. Flush area with water to remove residues. Do not touch or walk through spilled material. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

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.

Methods and materials for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste in accordance with federal state and local regulations. Ensure adequate ventilation.

Section 7. Handling and Storage

Precautions for safe handling: Open and handle receptacle with care. Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols. Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Keep container closed when not in use.

Conditions for safe storage including any incompatibilities: Keep container(s) tightly closed and properly labeled. Store in cool, dry, well-ventilated areas away from heat, direct sunlight, strong oxidizers and any 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 container retain residue and may be dangerous. Do not cut, drill, grind, weld or perform similar operations on or near containers. Crystalline silica may be generated when machining cured products. Overexposure may create possible cancer and silicosis hazard.

Section 8. Exposure Controls / Personal Protection

Exposure Guidelines:

Component	OSHA TWA	NIOSH TWA	ACGIH TWA
Silica Crystalline	10 mg/m ³	-	-
Aluminium	15 mg/m ³ (Total dust) 5 mg/m ³ (respirable fraction)	2 mg/m ³	-
Titanium dioxide	15 mg/m ³	-	10 mg/m ³

Appropriate engineering controls: Provide adequate ventilation. In case of development of vapors or dust: The use of local exhaust ventilation is recommended.

Personal protective equipment:

Hygiene measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

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. Use NIOSH approved organic vapor cartridge respirator when vapor mist exposure is likely.

Eye / Face 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. Chemical-resistant clothing is recommended to avoid prolonged contact. Avoid unnecessary skin contact. Wear gloves, long sleeved shirt, long pants and other protective clothing as required to minimize skin contact

Environmental exposure controls: Do not allow material to contaminate ground water system.

Section 9. Physical and Chemical Properties

Appearance (color):	No data available
Odour:	No data available
pH:	No data available
Melting point range:	Not applicable
Initial Boiling point/boiling range:	No data available
Flash Point:	No data available
Evaporation rate:	No data available
Percent volatile:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability or explosive limits:	No data available
Vapour pressure:	No data available
Vapour density:	No data available
Relative density:	No data available
Specific gravity:	2.63
Solubility in water:	No data available
Partition coefficient (n-octanol/water):	Not applicable
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	No data available
Explosive properties:	No data available
VOC Content:	0.0 %
Solvent content:	0.0 %
Solids by weight:	99.94%

Section 10. Stability and Reactivity

Reactivity: No further relevant information available.

Chemical stability: Stable at normal temperature and pressure.

Possibility of hazardous reactions: No dangerous reactions known.

Conditions to avoid: Avoid contact with heat, flame, spark and other igniter. Avoid radical forming substances (metal-ions, peroxides). Uncontrolled polymerization may cause rapid evolution of heat and increase in pressure that could result in violent rupture of sealed storage vessels or containers.

Incompatible materials: Avoid oxidizing agents, acids and bases.

Hazardous decomposition products: Carbon monoxide, carbon dioxide and various hydrocarbons upon thermal decomposition.

Section 11. Toxicological Information

Information on toxicological effects:

Acute toxicity:

Ingestion: May cause gastrointestinal disturbances such as nausea, vomiting, diarrhea and effects similar to those described in inhalation. Aspiration of this product into the lungs during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.

Aspiration Hazard: No Data Available

Carcinogenicity: Suspected of causing cancer.

Germ Cell Mutagenicity: No Data Available.

Reproductive Toxicity: No Data Available.

Respiratory/Skin Sensitization: May cause respiratory tract irritation. 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: May cause damage to organs through prolonged or repeated exposure.

Specific Target Organ Toxicity - Single Exposure: Exposure to high concentrations of vapors may cause central nervous system effects, including headache, drowsiness, and incoordination.

Section 12. Ecological Information

Aquatic toxicity: Toxic to aquatic life. Toxic to aquatic life with long lasting effects

Mobility in soil: No data available

Persistence and degradability: data available

Bioaccumulative potential: No data available

Section 13. Disposal Considerations

Waste treatment methods: Under RCRA it is the responsibility of the user of the product to determine 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.

Uncleaned packaging: 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. Disposal must be made according to official regulations.

Section 14. Transport Information

U.S. DOT Information: Not regulated.

IMDG Information: Not regulated.

IATA Information: Not regulated.

Section 15. Regulatory Information

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

Component	Regulation list
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Iron	SARA312, TSCA
Silica crystalline	SARA312, TSCA, ACGIH, OSHA
Aluminium	SARA312, SARA313, TSCA, ACGIH, OSHA
Carbon black	SARA312, TSCA, ACGIH, OSHA

Section 16. Other Information

Key Legend Information:

IMDG: International Maritime Code for Dangerous Goods
 DOT: US Department of Transportation
 IATA: International Air Transport Association
 ACGIH: American Conference of Governmental Industrial Hygienists
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 HMIS: Hazardous Materials Identification System (USA)
 vPvB: very Persistent and very Bioaccumulative
 NIOSH: National Institute for Occupational Safety
 TLV: Threshold Limit Value
 PEL: Permissible Exposure Limit
 REL: Recommended Exposure Limit

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