

SAFETY DATA SHEET

Trade Name: RETRO-COAT, PART A

Land Science Technologies
1011 Calle Sombra
San Clemente, CA 92673

PHONE: 949-366-8000
EMAIL: CustomerService@landsciencetech.com

1. PRODUCT IDENTIFICATION

- 1.1. **GHS product identifier:** Retro-Coat, Part A
1.2. **Other means of identification:** Epoxy Resin
1.3. **Recommended use of the chemical and restrictions on use:** N/A

2. HAZARD(S) IDENTIFICATION

- 2.1. **Classification of the substance or mixture:**
Skin Corrosion/Irritation 2, Acute Aquatic Toxicity 1
2.2. **GHS label elements:**



Signal Word: Warning
Hazard Statement: Causes skin irritation
Prevention: Wash hands thoroughly after handling. Wear protective gloves.
Response: If on skin: wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention. Take off contaminated clothing and wash before reuse.



Signal Word: Warning
Hazard Statement: Very toxic to aquatic life.
Prevention: Avoid release into the environment.
Response: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Disposal: Dispose of in accordance with federal, state, and local regulations.

- 2.3. **Other hazards which do not result in classification:** N/A
2.4. **Hazards Material Information System (United States):**

Health	2
Flammability	1
Physical Hazard	0

Hazard Codes: Minimal Hazard, 1=Slight Hazard, 2=Moderate Hazard, 3=Serious Hazard, 4=Severe Hazard

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Mixtures

Chemical Identity	CAS No.	Concentration
Proprietary Resin	NA	30-60%
Proprietary Ether	NA	30-60%

4. FIRST-AID MEASURES

4.1. Description of necessary first-aid measures:

Eye Contact: Remove contact lenses at once. Immediately flush eyes with large amounts of water or normal saline for at least 30 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Prompt medical attention is essential.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician if irritation persists. Wash clothing before reuse. Contaminated leather articles, including shoes, cannot be decontaminated and should be destroyed to prevent reuse.

Inhalation: Remove to fresh air if effects occur. If not breathing, give artificial respiration. Get immediate medical attention.

Ingestion: Do not induce vomiting. If patient is conscious and can swallow, give two glasses of water (16 oz.). Get immediate medical attention. Never give anything by mouth to an unconscious or convulsing person.

4.2. Most important symptoms/effects, acute and delayed:

Signs and Symptoms: Irritation as noted above. Skin sensitization (allergy) may be evidenced by rashes, especially hives.

Aggravated Medical Conditions: Preexisting skin and eye disorders may be aggravated by exposure to this product. Preexisting skin and lung allergies may increase the chance of developing increased allergy symptoms from exposure to this product.

Other Health Effects: Based on animal studies, repeated exposure to components of this product may cause damage to liver, kidney, and respiratory systems. Reports have associated repeated and prolonged occupational exposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling vapors may be harmful or fatal.

4.3. Indication of immediate medical attention and special treatment needed, if necessary:

Note to Physician: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient. Contact a poison control center for additional treatment information.

5. FIRE-FIGHTING MEASURES

5.1. Suitable extinguishing media: Use alcohol type foam, dry chemical, or CO₂.

5.2. Specific hazards arising from the chemical: None known.

5.3. Special protective actions for fire-fighters: Use water spray to cool fire exposed surfaces and to protect personnel. If a leak or spill has not ignited, use water spray to disperse the vapors. Contain the runoff stream. Try to cover liquid spills with foam. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves, and rubber boots), including a positive pressure NIOSH approved self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures: Ventilate the area. Avoid breathing vapor. Use self-contained breathing apparatus or supplied air for large spills or confined areas.

6.2. Methods and materials for containment and clean up: Contain spill if possible. Wipe up or absorb on suitable material and pick up with shovels. Do not use sawdust, wood chips, or other cellulosic materials to absorb the spill. Prevent entry into sewers and waterways. Dispose of in accordance with federal, state, and local regulations.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling: Ground all transfer equipment. Take precautionary measures against static discharge. Handle as an industrial chemical.

7.2. Conditions for safe storage, including any incompatibilities: Keep container tightly closed when not in use. Practice good caution and personal cleanliness to avoid skin and eye contact. Hold bulk

storage under nitrogen blanket. Store in a cool, dry place with adequate ventilation. Keep away from open flames and high temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. **Control parameters:** N/A

8.2. **Appropriate engineering controls:** N/A

8.3. **Individual protection measures, such as personal protective equipment:**

Respiratory Protection: Provide adequate ventilation. Avoid breathing of vapors or mists. Airborne concentrations should be kept to lowest levels possible. When exposures are not adequately controlled, use an approved respirator. Selection of air-purifying or positive-pressure supplied air will depend on the specific operation and the potential airborne concentration of the material. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.

Protective Clothing: Protective clothing such as uniforms, coveralls, or lab coats must be worn. Launder or dry-clean when soiled. Gloves and goggles resistant to chemicals and petroleum distillates required. When handling large quantities, impervious suits, gloves, and rubber boots must be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. **Appearance (physical state, color, etc.):** tinted liquid

9.2. **Odor:** Mild epoxy odor

9.3. **Odor threshold:** N/A

9.4. **pH:** Not determined.

9.5. **Melting point/freezing point:** N/A

9.6. **Initial boiling point and boiling range:** 342 °F

9.7. **Flash Point:** >230° F (closed cup)

9.8. **Evaporation rate:** Not established

9.9. **Flammability (solid, gas):** N/A

9.10. **Upper/lower flammability or explosive limits:** LEL = N/A UEL = N/A

9.11. **Vapor pressure:** Not established

9.12. **Vapor Density:** N/A

9.13. **Relative density (specific gravity):** 1.31

9.14. **Solubility(ies):** Not soluble (in water)

9.15. **Partition coefficient; n-octanol/water:** N/A

9.16. **Auto-ignition temperature:** N/A

9.17. **Decomposition temperature:** N/A

9.18. **Viscosity:** N/A

9.19. **Solids:**

9.20. **VOC:**

10. STABILITY AND REACTIVITY

10.1. **Reactivity:** N/A

10.2. **Chemical stability:** Excess heating over long periods of time degrades the resin.

10.3. **Possibility of hazardous reactions:** Will not occur by itself, but masses of more than 1 pound of product plus an aliphatic amine will cause irreversible polymerization with considerable heat buildup.

10.4. **Conditions to avoid:** Avoid exposure to heat, light, flame, or other sources of ignition.

10.5. **Incompatible materials:** Can react vigorously with strong oxidizing agents, strong lewis or mineral acids, and strong mineral and organic bases/especially primary and secondary amines. Reaction with some curing agents may produce considerable heat.

10.6. **Hazardous decomposition products:** Hazardous combustion products may include intense heat, dense black smoke, carbon monoxide, carbon dioxide, aldehydes, acids, phenolics, water, and hydrocarbon fragments.

11. TOXICOLOGICAL INFORMATION

11.1. **Likely routes of exposure:** N/A

11.2. **Symptoms related to the physical, chemical and toxicological characteristics:**

Eye Contact: Irritating and will injure eye tissue if not removed promptly.

Skin Contact: May cause severe irritation. Has been known to cause allergic skin reaction in humans.

Inhalation: High vapor concentrations are irritating to the eyes and respiratory tract, may cause headaches and dizziness, are anesthetic, and may have other central nervous system effects.

Ingestion: Single dose oral toxicity is considered to be extremely low. No hazards anticipated from swallowing small amounts incidental to normal handling operations.

11.3. **Delayed and immediate effects and also chronic effects from short and long term exposure:**
N/A

11.4. **Numerical measures of toxicity:**

Ingredient Name	CAS No.	%	Acute Oral LD50	Acute Dermal LD50	Acute Inhalation LC50
Proprietary Epoxy Resin	NA	30-60	> 2000 mg/kg (rat)	> 2000 mg/kg (rabbit)	Not available
Proprietary Ether	NA	30-60	2570 mg/kg (rat)	Not available	Not available

12. ECOLOGICAL INFORMATION

12.1. **Ecotoxicity:** N/A

12.2. **Persistence and degradability:** N/A

12.3. **Bioaccumulative potential:** N/A

12.4. **Mobility in soil:** N/A

12.5. **Other adverse effects:** N/A

13. DISPOSAL CONSIDERATIONS

13.1. **Disposal methods:** Dispose of in accordance with federal, state, and local regulations.

14. TRANSPORT INFORMATION

14.1. **UN number:** UN3082

14.2. **UN proper shipping name: DOT:** Not Regulated

IMDG/IATA: Environmentally Hazardous Substance, Liquid, NOS (Epoxy Resin), 9, PGIII, UN3082

14.3. **Transport hazard class(es):** 9

14.4. **Packing group, if applicable:** III

14.5. **Environmental hazards:** Marine Pollutant

14.6. **Transport in bulk:** N/A

14.7. **Special precautions for user:** N/A

15. REGULATORY INFORMATION

15.1. **Safety, health and environmental regulations:**

Not meant to be all-inclusive. Selected regulations presented.

A. SARA Title III Section 311/312 hazards: Immediate health

B. WHMIS Classification: D2B

C. TSCA Status: listed on TSCA Inventory

D. OSHA Hazard Comm. Std.: See Section 2

CA = California Haz. Subst. List; CA65 = California Safe Drinking Water and Toxics Enforcement Act List; CT = Connecticut Tox. Subst. List; FL = Florida Subst. List; IL = Illinois Tox. Subst. List; LA = Louisiana Haz. Subst. List; MA = Massachusetts Subst. List; ME = Maine Haz. Subst. List; MN = Minnesota Haz. Subst. List; NJ = New Jersey Haz. Subst. List; PA = Pennsylvania Haz. Subst. List; RI = Rhode Island Haz.

Subst. List.

16. OTHER INFORMATION

Additional Information Contact:

PHONE: 949-366-8000

EMAIL: CustomerService@landsciencetech.com

Land Science Technologies

1011 Calle Sombra

San Clemente, CA 92673

Land Science Technologies cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.