

MATERIAL SAFETY DATA SHEET

for Petropoxy 154 Resin

Section I - Material Identification

Material Name: Petropoxy 154 Resin

Family/Chemical Name: Liquid Epoxy Resin

Manufacturer: Burnham Petrographics LLC

5029 W. Lodestar Ave.

Rathdrum, ID 83858 USA

Emergency Telephone Number: 208 687 5951, Fax: 208 687 0232

Revision Date: 1 January 2012

Important: This material is sold to be used for adhering rocks to glass slides, and impregnation or stabilizing rocks, in a laboratory setting, following the instructions provided. Burnham Petrographics LLC is not able to recommend this material as safe and effective for other uses. This product is considered to be a hazardous chemical under federal OSHA hazard communication standard 29 CFR 1910.1200.

Section II - Hazardous Ingredients

Specific Chemical Names:

1. 7-oxabicyclo{4.1.0}heptane-3-carboxylic acid, 7-oxabicyclo{4.1.0}hept-3-ylmethyl ester
CAS #: 2386-87-0
Common Name: 3,4-epoxycyclohexylmethyl-3,4-epoxycyclohexane carboxylate
Exposure Limits: OSHA PEL - not established; ACGIH TLV - not established
Carcinogenicity: This chemical is not established to be carcinogenic by NTP, IARC, or OSHA.

2. Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane
CAS #: 25068-38-6
Common Name: Bisphenol A diglycidyl ether polymer
Exposure Limits: OSHA PEL: -not established; ACGIH TLV - not established
Carcinogenicity: This chemical is not established to be carcinogenic by NTP, IARC, or OSHA.
Molecular Weight: ca. 185

Section III - Physical Data

Appearance and Odor: Clear liquid, faint odor

Boiling Point: >200°C

Vapor Pressure: <0.01 mm Hg at 20°C, 1mm Hg at 200°C

Solubility In Water: Insoluble

Evaporation Rate: <0.1 (butyl acetate = 1)

Percent Volatile: Nil

Vapor Density: 8.7 (air = 1)

Specific Gravity: 1.2 (H₂O = 1)

Section IV - Fire and Explosion Hazard Data

Flash Point: >200°F Closed cup.

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

Fire Fighting Procedures-Special: Use self-contained breather apparatus.

Unusual Fire and Explosion Hazards: Decomposition and combustion products may be toxic.

Section V - Reactivity Data

Stability: Stable.

Conditions To Avoid: Temperatures >200°C

Incompatibility: Strong oxidizers, acids, and alkalis.

Hazardous Thermal-Oxidative Decomposition Products: Carbon monoxide, carbon dioxide, aldehydes.

Hazardous Polymerization: Will not occur without catalyst.

Conditions To Avoid When Used With Supplied Catalyst:

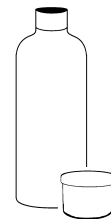
1. Elevated temperatures above those recommended in the instruction manual.
2. Excessive mass (10ml maximum).

Revised Jan 2012

Burnham Petrographics, LLC

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Section VI - Health Hazard Data

Primary Route of Exposure: Dermal

Oral LD50: >500 mg/kg (rats)

Dermal LD50: >5000 mg/kg

Skin Irritation: Mild Irritation (rabbits)

Eye Irritation: Mild Irritation (rabbits)

Inhalation LC50: No deaths after 8 hour exposure to concentrated vapor (rats).

Overexposure Effects: Skin irritation, may cause sensitization and dermatitis.

Medical Conditions Aggravated By Exposure: Allergy, eczema or skin conditions.

Emergency and First Aid Procedures:

Eyes: Immediately flush eyes with water for at least 15 minutes. Call a physician.

Skin: Promptly wash with mild soap and water. Avoid using alcohol. Cleaning the skin with alcohol, while effective in removing the resin from the surface of the skin, may allow the skin to absorb the resin-alcohol mixture.

Ingestion: If conscious, give 3-4 glasses of water. Do not induce vomiting. Get medical attention.

Other: Promptly remove contaminated clothing. Wash before reuse.

Toxicological Note: A synergistic interaction was reported for the carcinogenicity of a mixture of bisphenol A epoxy and bis(epoxycyclopentyl) ether to mouse skin (Holland et al., Cancer Res., 39, 1717-1725, 1979), although neither compound was clearly carcinogenic when applied individually. Bently et al., (Carcinogenesis, 10, 321-327, 1989) elucidated a mechanism involving inhibition of hydrolysis, whereby this may occur, and which might potentially apply to mixtures of bisphenol A epoxide and other cycloaliphatic epoxides. However, similar hydrolysis and alkylation potency studies (Sagelsdorff et al., Ciba Specialty Chemicals document, 1997) have shown that 3,4-epoxycyclohexylmethyl 3,4-epoxycyclohexane carboxylate has a much lower alkylation activity and is hydrolyzed more rapidly than other investigated epoxides. The authors conclude that combinations with 3,4-epoxycyclohexylmethyl 3,4-epoxycyclohexane carboxylate are unlikely to increase the genotoxicity of the epoxide.

Note: This material is a primary skin irritant (moderate) and will cause dermatitis upon prolonged or repeated skin contact. Some susceptible individuals may become sensitized after repeated or prolonged contact and thereafter exhibit an allergic response.

Note: Avoid excessive inhalation exposure. Use good ventilation. See Section VIII.

Section VII - Spill or Leak Procedures

Spill Procedures: Absorb onto sand, sawdust, vermiculite or other absorbent material. Wash the area with soap and water, or wipe with alcohol.

Waste Disposal: No special requirements for small amounts. Dispose as land fill sludge.

Section VIII - Special Protection Information

Ventilation: As a matter of good respiratory hygiene, forced mechanical ventilation is recommended. Keep airborne exposure low by using a dedicated hood, suitable for removing nuisance vapors, over hot plates and ovens.

Protective Clothing and Equipment:

Use impervious gloves.

Use NIOSH approved respirator suitable for organic vapors, if required

Wear other appropriate equipment, as required, to prevent exposure and personal contact.

Approved barrier creams can sometimes provide added protection in conjunction with impervious gloves.

Other: Maintain good housekeeping and personal hygiene standards.

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein.

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