

CYCLO[®] INDUSTRIES, LLC

MATERIAL SAFETY DATA SHEET

This MSDS is being provided to your company for the purpose of providing current health and safety information to your management and for your employees who work with this product. Please read the information on these sheets and then provide this information to those people at your company whose responsibility it is to comply with FEDERAL, STATE and COMMUNITY RIGHT TO KNOW regulations. Also, make this information available to any employee who requests it.

If Cyclo Industries, LLC considers the formula of this product to be a trade secret, the exact chemical names of the ingredient(s) and the percentages in which they are combined will not appear in the body of this sheet. The exact composition is available upon request to physicians, industrial hygienists and other health professionals.

SECTION 1 – PRODUCT & COMPANY IDENTIFICATION

Product Name: Cyclo[®] UltraWeld[®] Clear Epoxy Bonding Compound (Part B - Resin),
Stock No. C-943

Product Use: Fills and bonds almost anything. For use on concrete, metal, wood, glass, china, plastic, tile and more.

Manufactured by: Cyclo Industries, LLC
10190 Riverside Drive, Palm Beach Gardens, Florida 33410-4881
Telephone: (561) 775-9600

First Aid Emergency: (800) 752-7869 or (312) 906-6194

Shipping Emergency: (800) 424-9300 or (703) 527-3887 (CHEMTREC)

SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

CAS Reg. No.	Material	Percentage	Exposure Limits
25068-38-6	Bisphenol A Epoxy Resin	*	None established
*	Acrylated polyols	*	None established

Component 1 is an epoxy resin produced by the condensation reaction of epichlorohydrin and bisphenol-A. These raw materials are consumed in the process. Residual levels of epichlorohydrin and controlled to 1 ppm max in the product.

* The specific chemical identity and/or proportion of this component is being held as Trade Secret information in accordance with 29CFR 1910-1200.

SECTION 3 – HAZARDS IDENTIFICATION

Effects of Overexposure:

Ingestion: Product may be moderately toxic.

Inhalation: Not expected to be a relevant route of exposure, however, under conditions where exposure to vapors or mists is possible, could cause respiratory tract irritation.

Skin Contact: Product may be moderately irritating to the skin. May cause skin sensitization. Prolonged contact may result in severe skin irritation such as blistering, ulcers and deep scarring.

SECTION 3 – HAZARDS IDENTIFICATION continued

Eye Contact: Product may be severely irritating to the eyes.

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

Medical Conditions Generally Aggravated by Exposure: Preexisting eye, skin and respiratory disorders may be aggravated by exposure to this product.

SECTION 4 – FIRST AID MEASURES

First Aid Procedures:

Ingestion: DO NOT INDUCE VOMITING. In general, no treatment is necessary unless large quantities of product are ingested. However, get medical advice.

Skin Contact: Remove contaminated clothing/shoes and wipe excess from skin. Flush skin with water. Follow by washing with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned. Contaminated leather articles, including shoes, cannot be decontaminated and should be destroyed to prevent reuse.

Inhalation: Remove victim to fresh air and provide oxygen if breathing is difficult. Give artificial respiration if not breathing. Get medical attention.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Get medical attention.

SECTION 5 – FIRE FIGHTING MEASURES

Flash Point: >200°F (>93°C) **Method Used:** Setaflash

Flammable Limits in Air by Volume:

Lower Explosion Level (LEL) = Not available Upper Explosion Level (UEL) = Not available

Extinguishing Media: Alcohol foam, CO₂, dry chemical, water fog

Special Fire Fighting Procedures: Material will not burn unless preheated. Do not enter confined fire space without full bunker gear (helmet with face shield, bunkercoats, gloves and rubber boots), including a positive pressure NIOSH approved self-contained breathing apparatus. Cool fire exposed containers with water.

Unusual Fire and Explosion Hazards: Heating this resin above 300°F (149°C) in the presence of air may cause slow oxidative decomposition; above 500°F (260°C) polymerization may occur. Some curing agents, e.g. aliphatic polyamines can produce exothermic reactions which, in large masses, can cause runaway polymerization and charring of the reactants. Fumes and vapors from these thermal and chemical decompositions vary widely in composition and toxicity.

HMIS Code: Health = 3 Flammability = 2 Reactivity = 0

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill/Leak Procedures: Avoid breathing vapors. May burn although not readily ignitable. Ventilate area. Remove all sources of ignition. Keep out of surface waters, sewers and waterways entering or leading to surface waters. Clean up area with absorbent material and place in closed containers for disposal.

SECTION 7 – HANDLING AND STORAGE

Handling Procedures: Keep away from open flame and high temperatures. Do not exceed 120°F (50°C) for 25 hours – hazardous polymerization may occur. Avoid exposure to light. May cause skin sensitization. Eye irritant. May cause skin and respiratory tract irritation. Wash with soap and water before eating, drinking, smoking, applying cosmetics or using toilet facilities. Launder contaminated clothing before reuse. Contaminated leather article, including shoes, cannot be decontaminated and should be destroyed to prevent reuse. See product label for additional information. KEEP OUT OF THE REACH OF CHILDREN.

Storage Procedures: Store and use in cool, dry, well-ventilated areas. Do not store above 120°F (50°C).

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: Avoid breathing vapors which may be produced under some conditions such as heating or application of uncured material over large surface areas (e.g., flooring or painting). Avoid mists which may be formed by various methods of application. Use a NIOSH-approved respirator as required to prevent overexposure. In accord with 29 CFR 1910.134, use either an atmosphere-supplying respirator or an air-purifying respirator for organic vapors.

Ventilation: Use as required to control vapor concentrations.

Protective Gloves: Avoid contact with skin. Wear chemical-resistant gloves.

Eye Protection: Avoid contact with eyes. Wear chemical goggles if there is likelihood of contact with eyes.

Other Protective Equipment: Avoid contact with skin and clothing. Wear chemical-resistant protective clothing.

Work/Hygienic Practices: Eye washes and safety showers in the workplace are recommended.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: Not available

Specific Gravity (H₂O=1): 1.17

Vapor Pressure (mm Hg): <0.1 @ 20°C

Vapor Density (Air = 1): Not available

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES continued

Solubility in Water: Negligible**pH:** Not available**Percent Volatile By Volume (%):** Not available **Evaporation Rate (Butyl Acetate = 1):** Not available**Appearance and Odor:** Light viscous liquid with mild odor.

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable**Conditions to Avoid:** Heat (>120°F / 50°C) and flame. Do not heat with band heaters or other methods that could produce “hot spots” and do not exceed recommended heating temperatures or times in order to prevent hazardous polymerization.**Incompatibility (materials to avoid):** Strong oxidizing agents, strong lewis or mineral acids and strong mineral and organic bases, especially primary and secondary aliphatic amines.**Hazardous Decomposition or Byproducts:** Carbon monoxide, aldehydes and acids may be formed during combustion.**Hazardous Polymerization:** May occur.

SECTION 11 – TOXICOLOGICAL INFORMATION

Comp. No.	Ingredient	Acute Oral LD50	Acute Dermal LD50	Acute Inhalation LD50
1	Bisphenol A Epoxy Resin	11.4 g/kg (rat) 15.6 g/kg (mouse)	>20 mL/kg (rabbit)	No deaths sat'd air 8H (rat)*
2	Acrylated polyols	1500 mg/kg (rat)**	2000 mg/kg (rat)**	No data available

* This inhalation study may not be relevant due to the low volatility of product.

** Data on similar product

Component 1 chronic studies: Recent 2-year bioassays in mice exposed by the dermal route to Epon Resin 828. A resin similar to component 1, the diglycidyl ether of bisphenol A (DGEBA), or to other commercial resins which are composed predominately of DGEBA have yielded very limited evidence of weak carcinogenicity.

DGEBA is a component of this resin. The authors of this work concluded that the renal tumor evidence with Epon Resin 828 “was of no biological significance” and that the resin “is not a systemic carcinogen when applied to the dorsal skin of CF1 mice.” Based upon this and all other available information, the international agency for research on cancer (IARC) concluded (1988) that DGEBA was not classifiable as a carcinogen (IARC Group 3) based on the following: Human evidence – inadequate; animal evidence – inadequate.

SECTION 11 – TOXICOLOGICAL INFORMATION continued

Both Epon Resin 828, a resin similar to component 1 and DGEBA, its major constituent, have proved to be inactive when tested by in vivo mutagenicity assays. They have both shown activity in vitro microbial mutagenicity screening tests and have produced chromosomal aberrations in cultured rat liver cells. The significance of this information to man is unknown.

Component 2: An 18-month skin painting study in mice on a residual material in component 2 showed an increased incidence of lymphomas. There was no evidence of skin tumors. Internal organ histopathology slides from this study were peer reviewed and it was concluded that the lymphomas were misdiagnosed.

Two-year skin painting studies on a material similar to component 2 showed a slight increase in skin tumors at high dose levels. IARC classification 3 – not classified as to carcinogenicity. This similar material produced both positive and negative ames test result, but in vivo mutagenicity studies gave negative results. No effects were observed in teratogenicity studies with rats and rabbits.

SECTION 12 – ECOLOGICAL INFORMATION

Aquatic/Terrestrial Toxicity Environmental Fate No data is available at this time.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of in accordance with local, state and federal regulations. Before attempting clean up, refer to other sections of this MSDS for hazard caution information.

SECTION 14 – TRANSPORT INFORMATION

U.S. DOT

Shipping Description: Non-Hazardous
ID Number: Not applicable
Hazard Class: Not applicable
Packing Group: Not applicable
Label: Not applicable
Placards: Not applicable

IMDG

Shipping Description: Non-Hazardous
ID Number: Not applicable
Hazard Class: Not applicable
Packing Group: Not applicable
Label: Not applicable
Markings: Not applicable
Placards: Not applicable

SECTION 15 – REGULATORY INFORMATION

TSCA Inventory: All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory of chemical substances maintained by the U.S. Environmental Protection Agency.

SARA Extremely Hazardous Substances None

SECTION 15 – REGULATORY INFORMATION continued

SARA Section 313 This product contains the following toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 (SARA 313 – Toxic Chemical Release Reporting)

<u>Chemical Name</u>	<u>CAS#</u>	<u>Weight %</u>
None		

CERCLA/Superfund (RQ): This product is not subject to CERCLA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

California Proposition 65: Phenyl Glycidyl Ether / CAS #122-60-1 / <6 ppm

SECTION 16 – OTHER INFORMATION

Document Date: 4/28/03

Supersedes: New

Revisions: Not applicable

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