

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[®] Epoxy Steel Cold Welding Compound, Stock No. C-944
(Part B - Hardener)

Product Use: Use on aluminum, steel, bronze, brass, copper, ceramics, wood 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
14807-96-6	Calcium magnesium silicate	40 – 50	TWA: 2 mg/m ³ (OSHA INHALATION Respirable) TWA: 2 mg/m ³ (ACGIH INHALATION Respirable)
84852-15-3	Alkyl phenol	15 – 20	Not available
14807-96-6	Magnesium silicate	15 – 20	TWA: 2 mg/m ³ (OSHA Respirable) TWA: 2 mg/m ³ (ACGIH Respirable)
112-24-3	Triethylenetetramine	15 – 20	Not available
1317-61-9	Black iron oxide	0.1 – 1	TWA: 5 mg/m ³ (ACGIH) TWA: 10 mg/m ³ (OSHA)

SECTION 3 – HAZARDS IDENTIFICATION

Potential Acute Health Effects: Hazardous in case of eye contact (irritant). Slightly dangerous to dangerous in case of skin contact (corrosive, irritant), of inhalation. Non-permeator by skin. Non-hazardous in case of ingestion. Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. See Section 8 for Special Protection Information. Be careful that the product is not present at a concentration level above TLV.

Potential Chronic Health Effects: Very dangerous in case of eye contact (irritant). Hazardous in case of skin contact (irritant). Slightly dangerous to dangerous in case of inhalation. The substance is toxic to lungs, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Avoid contact.

Carcinogenicity: NTP Carcinogen = No; IARC Monographs = No; OSHA Regulated = No

SECTION 4 – FIRST AID MEASURES

First Aid Procedures:

- Ingestion:** DO NOT induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.
- Skin Contact:** If the chemical got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical touches the victim's exposed skin, such as the hands: Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.
- Inhalation:** Allow the victim to rest in a well-ventilated area. Seek immediate medical attention.
- Eye Contact:** Check for and remove any contact lenses. IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. DO NOT use an eye ointment. Seek medical attention.

SECTION 5 – FIRE FIGHTING MEASURES

Flash Point: 240.8°F (116°C)

Method Used: Closed cup

Flammable Limits in Air by Volume: Lower Explosion Level (LEL) = Not available
Upper Explosion Level (UEL) = Not available

SECTION 5 – FIRE FIGHTING MEASURES continued

Extinguishing Media: Foam, CO₂, dry chemical, water spray, water fog

Special Fire Fighting Procedures: SMALL FIRE: Use DRY chemicals, CO₂, water spray or foam.
LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.

Unusual Fire and Explosion Hazards: No additional remarks

HMIS Code: Health = 3 Flammability = 1 Reactivity = 0

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill/Leak Procedures: Absorb with an inert material and put the spilled material in an appropriate waste disposal.

SECTION 7 – HANDLING AND STORAGE

Handling Procedures: Keep locked up. Keep container dry. Keep away from heat. Keep away from sources of ignition. DO NOT ingest. Do not breathe gas, fumes, vapor or spray. Avoid contact with eyes. Never add water to this product. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or label. See product label for additional information. KEEP OUT OF THE REACH OF CHILDREN.

Storage Procedures: Keep container dry. Keep in a cool place. Corrosive materials should be stored in a separate safety storage cabinet or room.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Protection: Wear appropriate respirator when ventilation is inadequate.

Ventilation: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Protective Gloves: Impervious gloves required for prolonged or repeated contact.

Eye Protection: Safety glasses with splash guards or full face shield is recommended.

Other Protective Equipment: Impervious clothing and boots to prevent repeated or prolonged skin contact.

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

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 530.6°F (277°C) **Specific Gravity (H₂O=1):** 1.96
Vapor Pressure (mmHg @ 20°C): 0.05 **Vapor Density (AIR=1):** 2.5
Solubility in Water: Very slightly soluble in cold water. **pH:** Not available
Percent Volatile By Volume (%): 0%
Evaporation Rate (Butyl Acetate = 1): Lower than 1.
Appearance and Odor: Black liquid (paste).

SECTION 10 – STABILITY AND REACTIVITY

Stability: Unstable (Triethylenetetramine)
Conditions to Avoid: No additional remarks.
Incompatibility (materials to avoid): No specific information is available.
Hazardous Decomposition or Byproducts: No additional remarks.
Hazardous Polymerization: No additional remarks.

SECTION 11 – TOXICOLOGICAL INFORMATION

Toxicity to Animals: Acute oral toxicity (LD₅₀): 2500 mg/kg [Rat]. (Triethylenetetramine). Acute dermal toxicity (LD₅₀): 805 mg/kg [Rabbit]. (Triethylenetetramine)
Toxic Effects on Humans: The substance is toxic to lungs, mucous membranes. Hazardous in case of eye contact (irritant). Slightly dangerous to dangerous in case of skin contact (corrosive, irritant), of inhalation. Non-permeator by skin. Non-hazardous in case of ingestion.
Special Remarks on Other Toxic Effects on Humans: Dust Exposure (mg/m³) is only a concern when the applied coating is being removed. (Calcium magnesium silicate).

SECTION 12 – ECOLOGICAL INFORMATION

Aquatic/Terrestrial Toxicity Environmental Fate No data is available at this time.
Products of Biodegradation: Possibly hazardous short/long term degradation products are to be expected.

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: Consumer Commodity ORM-D
ID Number: Not applicable
Hazard Class: Not applicable
Packing Group: Not applicable
Label: Not applicable
Placards: Not applicable

IMDG

Shipping Description: CORROSIVE LIQUID, TOXIC, N.O.S. (Alkyl Phenol) Limited Quantity
ID Number: UN2922
Hazard Class: 8 and 6.1
Packing Group: II
Label: Not required
Markings: Not required
Placards: Limited Quantity

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

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 CERC LA reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

California Proposition 65: This product does not contain chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.

SECTION 16 – OTHER INFORMATION

Document Date: 5/12/03

Supersedes: 8/7/02

Revisions: Added Sections 12, 14 and 15

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