

**MATERIAL SAFETY DATA SHEET**

MAY BE USED TO COMPLY WITH OSHA'S HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200 AND SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 PUBLIC LAW 99-499. STANDARD SHOULD BE CONSULTED FOR SPECIFIC REQUIREMENTS.

**SECTION I (IDENTIFICATION)****MANUFACTURER/  
SUPPLIERS NAME:**

**EUTECTIC CORPORATION**  
N94 W14355 Garwin Mace Drive  
Menomonee Falls, WI 53051 USA

**TELEPHONE NUMBER:**

1-800-558-8524

**PRODUCT NAME:****EUTECTIC ANTI-CAPPILARY COMPOUND (labeled Bernite Braze Barrier)****PRODUCT CLASSIFICATION:****Chemical Aid****SECTION II (HAZARDOUS INGREDIENTS/IDENTITY INFORMATION)**

**IMPORTANT:** This section covers the materials from which these products are manufactured. The fumes and gases produced during normal use of these products are covered in Section V. The term "Hazardous" in "Hazardous Ingredients" should not only be interpreted as a term required and defined in OSHA Hazard Communication Standard (29 CFR Part 1910.1200), but also as defined by other regulatory agencies. The chemicals or compounds subject to reporting under Title III, in Section 313, of the Superfund Amendments and Reauthorization Act (SARA) are marked by the symbol #.

**WARNING:** This product contains or produces a chemical known to the State of California to cause birth defects (or other reproductive harm) and cancer. (California Health & Safety Code 25249.5 et seq.)

<b>INGREDIENTS</b>	<b>CAS NO.</b>	<b>EXPOSURE LIMIT (mg/m<sup>3</sup>)</b>		<b>(By Weight)</b>
		<b>OSHA PEL</b>	<b>ACGIH TLV</b>	<b>PERCENT INGREDIENTS</b>
Kaolin	1332-58-7	5	2	30 - 60
Water	7732-18-5	Not listed	Not listed	30 - 60
Magnesium hydroxide	1349-42-8	Not listed	Not listed	5 - 10
Rosin (gum rosin)	8050-09-7	Not listed	Not listed	1 - 5
Mineral oil #	8012-95-1	5	5	1 - 5
Sodium gluconate	527-07-1	100 (mfg)	100 (mfg)	1 - 5
Sodium carbonate	497-19-8	Not listed	Not listed	1 - 5
Sodium 2(3H)Benzothiazolethion	2492-26-4	Not listed	Not listed	0.2 - 1.5
Quartz #	14808-60-7	0.1	0.05	< 0.1

**SECTION III (PHYSICAL DATA) - Yellow liquid****SECTION IV (FIRE AND EXPLOSION HAZARD DATA)**

**Non-Flammable:** Flames can ignite combustibles. Refer to American National Standard Z49.1 for fire prevention during welding. These products as shipped are non-hazardous, nonflammable, non-explosive, and non-reactive.

Rating under National Fire Protection 704: Health, 1; Flammability, 0; Reactivity, 0.

**SECTION V (REACTIVITY DATA)**

Welding and brazing fumes cannot be classified simply. The composition and quantity of both are dependent upon the metal being brazed, the process, procedure, and the product used. Other conditions which also influence the composition and quantity of the fumes and gases to which workers may be exposed include: coatings on the metal being brazed (such as paint, plating, or galvanizing), the number of welders and the volume of the work area, the quality and the amount of ventilation, position of the welder's head with respect to the fume plume, as well as the presence of contaminants in the atmosphere (such as chlorinated hydrocarbon vapors from cleaning and degreasing activities).

When the compound is heated, fume and gas decomposition products generated are different in percent and form from the ingredients listed in Section II. Fume and decomposition products, not the ingredients in the consumable, are important. Decomposition products include those originating from the volatilization, reaction, or oxidation of materials in Section II, plus those from the base metal and coating, etc., as noted above. These components are virtually always present as complex oxides and not as metals (Characterization of Arc Welding Fume: American Welding Society). Reasonably expected fume constituents of the fume could include carbon monoxide and carbon dioxide.

Monitor fume levels. One recommended way to determine the composition and quantity of fumes and gas to which workers are exposed is to take an air sample inside the welder's helmet if worn, or in the worker's breathing zone (see ANSI/AWS F1.1, F1.2, F1.3, F1.4, and F1.5, available from the "American Welding Society," 550 N.W. LeJeune Road, Miami, FL 33126).

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**SECTION VI (HEALTH HAZARD DATA)**

**Threshold Limit Value (TLV):** The **ACGIH** recommended general limit for welding fume NOS (not otherwise specified) is 5 mg/m<sup>3</sup>. The **ACGIH 1999** preface states: "The **TLV-TWA** should be used as guides in the control of health hazards and should not be used as firm lines between safe and dangerous concentrations." See Section V for specific fume constituents that may modify the **TLV**.

**EFFECTS OF OVEREXPOSURE** - Used as intended, product may create one or more of the following health hazards:

**FUMES AND GASES** can be dangerous to your health.

**PRIMARY ROUTES OF ENTRY** are the respiratory system. Other possible routes are eyes, ingestion, and/or skin contact.

**PREEXISTING** respiratory or allergic conditions may be aggravated in some individuals (i.e. asthma, emphysema).

**SHORT TERM (ACUTE) OVEREXPOSURE** to welding fumes may result in discomfort such as metal fume fever, dizziness, nausea, or dryness or irritation of nose, throat, or eyes. Inhalation of large amounts of mineral oil mist may cause adverse respiratory affects. May cause pulmonary effects.

**PRIMARY ROUTE OF ENTRY** is the respiratory system.

**LONG TERM (CHRONIC) OVEREXPOSURE** is believed by some investigators to affect pulmonary functions. **PRIMARY ROUTE OF ENTRY** is the respiratory system. Prolonged skin exposure to mineral oils may cause dermatitis.

See Section VII for precautions.

**EMERGENCY & FIRST AID PROCEDURES:** Call for medical aid. Employ first aid techniques recommended by The American Red Cross.

**INHALATION:** Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, begin artificial respiration.

If no detectable pulse, begin Cardiopulmonary Resuscitation. (CPR). Call for medical aid.

**SKIN:** Wash affected area with soap and water. If rash develops, see a physician.

**EYES:** Flush with a large amount of fresh water for at least 15 minutes. Get medical attention.

**INGESTION:** Seek medical attention.

**CARCINOGENICITY**

**SILICON DIOXIDE** - is listed as being carcinogenic to humans on **IARC** and **NTP** lists, and is listed by **NIOSH** as being a potential occupational carcinogen (with no further categorization).

**WELDING FUMES** (not otherwise specified) are considered to be carcinogenic defined with no further categorization by **NIOSH** and **IARC**.

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**SECTION VII (PRECAUTION FOR SAFE HANDLING AND USE/APPLICABLE CONTROL MEASURES)**

**Read and understand the manufacturer's instructions and precautionary label on this product.**

See American National Standard Z49.1, Safety in Welding and Cutting, published by the "American Welding Society," 550 N.W. LeJeune Road, Miami, FL 33126 and OSHA Publication 2206 (29CFR 1910), U.S. Government Printing Office, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954 for more detail on the following:

**Ventilation:** Use enough ventilation, local exhaust at the arc, or both, to keep the fumes and gases below the TLV's in the workers breathing zone and the general area. Train the employee to keep his or her head out of the fumes. Monitor fume levels and do not exceed permissible exposure limits or values.

**Respiratory Protection:** Use respirable fume respirator or air supplied respirator when working in a confined space or where local exhaust or ventilation does not keep exposure below the TLV's.

**Eye Protection:** Wear appropriate brazing glasses with side shield.

**Protective Clothing:** Wear head, hand, and body protection which help to prevent injury. See ANSI Z49.1.

**Waste:** Dispose of any waste residues in accordance with EPA or local regulations.

**Storage:** Keep product sealed before use. Keep this product away from children.

**Spills/Leaks:** For small spills, sweep up and dispose of in DOT approved waste containers. For larger spills, shovel into DOT approved waste containers. Keep large amounts from entering sewers, storm drains, surface water and soil.

**SUPPLEMENTAL INFORMATION**

IARC: International Agency for the Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

NIOSH: National Institute for Occupational Safety and Health

NTP: National Toxicology Program

PEL: Permissible Exposure Limit

OSHA: U.S. Occupational Safety and Health Administration

TLV: Threshold Limit Value

CAS: Chemical Abstracts Service Registry Number

Exposure limits are subject to change. Contact ACGIH, OSHA, NIOSH, and IARC for current values.

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