

**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.

**MANUFACTURER/  
SUPPLIERS NAME:**

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

**TELEPHONE NUMBER**  
1-800-558-8524

**PRODUCT NAME:** **ABRACOR® LF - Hardener**

**PRODUCT CLASSIFICATION:** **Wear Resistant Composite**

**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 #.

**1. Hazardous Ingredients:**

<b>Ingredient</b>	<b>%W/W</b>	<b>OSHA PEL mg/m<sup>3</sup></b>	<b>ACGIH TLV mg/m<sup>3</sup></b>	<b>CAS #</b>
Aliphatic Amine	40 – 50	N/E	N/E	80-05-07 111-40-0
Amido Amine	20 – 30	N/E	N/E	Secret 111-40-0 80-05-7 112-57-2
Nonylphenol	30 – 40	N/E	N/E	84852-15-3

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

**2. Physical Data:**

Boiling Point:	N/A	Color:	Amber
Vapor Pressure:	N/A	Appearance:	Thick liquid
Vapor Density:	N/A	Odor:	Ammonia
Solubility in Water:	Slight	Physical State:	Not Applicable
Specific Gravity:	0.98		

**3. Fire and Explosion Hazard Data:**

Flash Point	> 200 °F
Flammable Limits-	
LFL:	N/A
UFL:	N/A
Extinguishing Media:	Water fog, CO <sub>2</sub> , dry chemical, foam
Fire Fighting Equipment:	Water or foam may cause frothing which can be violent and life threatening if sprayed directly into burning liquid. Use self-contained breathing apparatus with full face piece.

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.

**4. Reactivity Data:**

Stability:	Stable
Condition to Avoid:	Extreme Heat
Materials to Avoid:	Strong oxidizing agents, mineral acids, organic acids, sodium or calcium hypochlorites, and peroxides.
Hazardous Products:	When product burns, may form toxic materials, carbon dioxide and carbon monoxide, ammonia, nitrogen oxides, nitric oxides, various hydrocarbons, etc.

**5. Environmental and Disposal Information:**

Spills/Leaks:	Scrape or wipe up with suitable material for disposal. Flush contaminated area with water.
Disposal Method:	Deposit in landfill in accordance with all local, state, and federal regulations or incinerate in accordance with local pollution regulations.

**6. Health Hazard Data:**

Eye:	Corrosive to eyes, may cause severe damage. Vapors may irritate eyes.
Skin Contact:	Corrosive to the skin. May cause sensitization. May be toxic if absorbed through skin.
Ingestion:	Product is corrosive to mouth, throat, and stomach. Moderately toxic if swallowed.
Inhalation:	Vapors can be corrosive to respiratory system. May be toxic if inhaled.
Chronic Effects:	Product is absorbed through the skin and may cause malaise, discomfort, injury, and death unless promptly treated.

**PRIMARY ROUTES OF ENTRY** are the respiratory system, eyes, and/or skin.

**PREEXISTING** respiratory or allergic conditions may be aggravated in some individuals.

**7. First Aid:**

Eye:	Flush eyes with water for 15 minutes and contact physician.
Skin Contact:	Remove contaminated clothing. Wash with soap and water.
Ingestion:	Seek medical attention.
Inhalation:	Remove to fresh air. Provide oxygen if necessary. Contact physician if adverse effects occur. Seek medical advice.

**8. Handling Precautions:**

Exposure Guidelines:	None established.
Eye Protection:	Chemical Goggles or Face Shield
Ventilation:	General mechanical ventilation. Exhaust required for application in confined areas.
Respiratory Protection:	Not required under normal conditions in a well ventilated workplace. At elevated temperatures, a respirator with cartridges approved for ammonia is required. Respirator is required while grinding, machining, or burning.
Protective Equipment:	Coveralls or work clothes covering skin, rubber gloves, eye protection.

**9. Comments:**

The information in this MSDS was obtained from sources we believe are reliable. However, this information is provided without any representation or warranty, expressed or implied, regarding accuracy or correctness. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons we do not assume responsibility and expressly disclaim liability of loss, damage, or expense arising from it or in any way connected with the handling, storage, use, or disposal of the product.

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<b>MANUFACTURER/ SUPPLIERS NAME:</b>	<b>EUTECTIC CORPORATION</b> N94 W14355 Garwin Mace Drive Menomonee Falls, WI 53051 USA	<b>TELEPHONE NUMBER</b> 1-800-558-8524
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**PRODUCT NAME:** ABRACOR® LF - Resin

**PRODUCT CLASSIFICATION:** Wear Resistant Composite

**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 #.

**1. Hazardous Ingredients:**

Ingredient	%W/W	OSHA PEL mg/m <sup>3</sup>	ACGIH TLV mg/m <sup>3</sup>	CAS #
Bisphenol A-Epichlorohydrin	40 – 50	N/E	N/E	25068-38-6
Bisphenol F	10 – 20	N/E	N/E	28064-14-4
Dibutyl Phthalate	0 – 10	N/E	N/E	84-74-2
Inorganic Fillers	30 – 40	N/E	N/E	Mixture

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

**2. Physical Data:**

Boiling Point:	N/A	Color:	Dark Red
Vapor Pressure:	N/A	Appearance:	Smooth Paste
Vapor Density:	N/A	Odor:	Sweet
Solubility in Water:	Slight	Physical State:	Not Applicable
Specific Gravity:	1.07		

**3. Fire and Explosion Hazard Data:**

Flash Point:	> 200 °F
Flammable Limits-	
LFL:	N/A
UFL:	N/A
Extinguishing Media:	Water fog, CO <sub>2</sub> , dry chemical, foam
Fire Fighting Equipment:	Water or foam may cause frothing which can be violent and life threatening if sprayed directly into burning liquid. Use self-contained breathing apparatus with full face piece and impervious protective clothing.

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.

**4. Reactivity Data:**

Stability:	Stable
Condition to Avoid:	Extreme Heat
Materials to Avoid:	Strong oxidizing agents, acids, bases, and amines.
Hazardous Products:	When product burns, may form toxic materials, carbon dioxide and carbon monoxide, various hydrocarbons, etc.

**5. Environmental and Disposal Information:**

Spills/Leaks:	Scrape or wipe up with suitable material for disposal. Flush contaminated area with water.
Disposal Method:	Deposit in landfill in accordance with all local, state, and federal regulations or incinerate in accordance with local pollution regulations.

**6. Health Hazard Data:**

Eye:	May cause eye irritation
Skin Contact:	May cause sensitization, reddening, irritation, and dermatitis after prolonged or repeated exposure.
Ingestion:	Single dose toxicity is considered extremely low.
Inhalation:	Irritation may be caused. Nausea, vomiting, and/or diarrhea may result.
Chronic Effects:	Repeated exposures are not anticipated to cause significant adverse effects. May aggravate disorders of the skin or lungs.

**PRIMARY ROUTES OF ENTRY** are the respiratory system, eyes, and/or skin.

**PREEXISTING** respiratory or allergic conditions may be aggravated in some individuals.

**7. First Aid:**

Eye:	Flush eyes with water for 15 minutes and contact physician.
Skin Contact:	Remove contaminated clothing. Wash with soap and water.
Ingestion:	Seek medical attention.
Inhalation:	Remove to fresh air. Provide oxygen if necessary. Contact physician if adverse effects occur.

**8. Handling Precautions:**

Exposure Guidelines:	None established.
Ventilation:	General mechanical ventilation. Exhaust required for application in confined areas.
Respiratory Protection:	Not ordinarily required, unless grinding or machining of product is necessary.
Protective Equipment:	Coveralls or work clothes covering skin, rubber gloves. Wear goggles when grinding or machining.

**9. Comments:**

The information in this MSDS was obtained from sources we believe are reliable. However, this information is provided without any representation or warranty, expressed or implied, regarding accuracy or correctness. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons we do not assume responsibility and expressly disclaim liability of loss, damage, or expense arising from it or in any way connected with the handling, storage, use, or disposal of the product.