

THE ONLY ADHESIVE LINE DEVELOPED EXCLUSIVELY FOR FIBER OPTICS

1. MATERIAL IDENTIFICATION

Product Name:


ÅNGSTRÖMBOND® AB9113SC HARDENER

Emergency Phone:

 For product emergencies involving spill, leak, fire, exposure, or accident call CHEMTREC at (800) 424-9300. For all other inquires call **Fiber Optic Center™, Inc.** at (800) 473-4237.

2. COMPOSITION
Exposure Limits

Hazardous Components	CAS No.	Percent	Exposure Limits	
			ACGIH TLV-TWA	OSHA PEL
Aliphatic Amine	Proprietary	< 60	N.E.	N.E.
Diethylenetriamine	110-40-0	< 30	1 ppm	1 ppm

Abbreviations: N.E. = Not Established

3. HEALTH HAZARDS IDENTIFICATION
Effects of Overexposure:

Material is a strong sensitizer and repeated contact or inhalation may cause irritation. Eye and skin contact may cause transient irritation.

4. FIRST AID MEASURES

Eyes: Flush eyes thoroughly with water, for at least 15 minutes while holding eyelids open. Seek medical attention.

Skin: Remove contaminated clothing, wipe excess from skin, and wash the affected area with soap and water. Wash contaminated clothing thoroughly before reuse. Obtain immediate medical attention.

Inhalation: Remove to fresh air, and provide oxygen or artificial respiration if needed.

Ingestion: Do NOT induce vomiting. Give water or milk unless the victim is drowsy, convulsing, or unconscious. Obtain immediate medical attention.

5. FIRE FIGHTING MEASURES
FLAMMABLE PROPERTIES

Flash Point: > 200°F

Explosive Limits: N/A

Auto-Ignition Temperature: N/A

Hazardous Decomposition Products: Carbon oxides, ammonia, nitric acid, nitrosamines, aldehydes, and nitrogen oxides.

EXTINGUISHING MEDIA and FIRE FIGHTING INSTRUCTIONS

When sufficiently large quantities are present, firefighters should be equipped with full bunker gear, including a positive pressure, NIOSH approved, self-contained breathing apparatus.

Extinguishing Media: Use water or "alcohol" foam.

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Rev. B 7/2001

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6. ACCIDENTAL RELEASE MEASURES

Ventilate the spill area, and evacuate if necessary. Shut off the source of the leak if it is safe to do so. Remove all ignition sources. Dike and contain large spills. Absorb with clay, sand, or another suitable material, and dispose of properly. Clean-up personnel should use adequate protective equipment, including respiratory protection.

7. HANDLING AND STORAGE

Store in a cool, dry place. Keep away from ignition sources and high temperatures. Avoid contact with incompatible materials. To avoid the formation of nitrosamines, do not mix with sodium nitrite or other nitrosating agents. Wear protective eyewear, chemical-resistant gloves, and other protective clothing as appropriate.

When it is mixed in a sufficiently large quantity with some epoxy resins, this product can produce exothermic reactions which can cause runaway polymerization and charring of the reactants. Fumes and vapors from these chemicals and thermal decompositions vary widely in composition and toxicity. Do not breathe fumes.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering / Ventilation Controls: General ventilation may be acceptable under most conditions, although local ventilation is required to control exposure whenever vapors, mists, or dusts are generated. Eye wash stations should be readily available.

Respiratory Protection: When local ventilation is unavailable and airborne limits are exceeded, a NIOSH-approved respirator for organic vapors, a supplied-air respirator, or a self-contained breathing apparatus is required.

Skin Protection: Impervious gloves and protective clothing should be worn as necessary.

Eye Protection: Chemical splash goggles with side shields should be worn as appropriate.

9. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions and use.

Conditions and Materials to Avoid: Keep away from ignition sources and high temperatures. Reacts with acids, alcohols, oxidizing agents, sodium or calcium hypochlorite, and reactive metals. When components of this product react with nitrous acid, nitrites, or nitrous oxides, cancer-causing nitrosamines may be formed. This product slowly corrodes copper, aluminum, zinc, and galvanized surfaces.

Hazardous Decomposition Products: Carbon oxides, ammonia, nitric acid, nitrosamines, aldehydes, and nitrogen oxides.

Hazardous Polymerization: Will not occur

10. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/State:	Dark-colored Liquid	Boiling Point:	> 300°F
Odor:	Ammoniacal odor	Freezing Point:	N/A
Specific Gravity:	1.0	Vap. Pressure (mmHG):	< 1
Solubility in Water:	Partial	Vap. Density (air = 1):	> 2

11. DISPOSAL CONSIDERATIONS

Keep out of surface waters, sewers, and waterways entering or leading to surface waters. Notify authorities if any exposure to the environment occurs or is likely to occur. Utilize an appropriate disposal facility, in compliance with applicable federal, state, and local environmental control regulations.

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12. TOXICOLOGICAL INFORMATION

This section provides toxicological information with regard to the pure form of the component indicated. It is suggested that this information be interpreted by persons trained in its evaluation.

Aliphatic Amine

Acute Oral LD50: 3160 mg/kg, rat
Acute Dermal LD50: > 2150 mg/kg, rat; 2500 mg/kg, rabbit
This component has been determined to be corrosive to the eyes and skin of a rabbit.

13. TRANSPORTATION INFORMATION**DOT / IATA Proper Shipping Name:** Amines, Liquid, Corrosive, N.O.S. (Aliphatic Amine)**Hazard Class:** 8**Packing Group:** II**ID:** UN2735**Label:** Corrosive**14. REGULATORY INFORMATION****TSCA**

The chemical components of this product are included in the TSCA Chemical Substance Inventory, as required.

SARA TITLE IIISection 313 – Toxic Chemicals

Pursuant to Section 313, this product does not contain any chemicals in a concentration equal to or greater than the *de minimis* level.

Section 311/312 – Hazard Categories

Fire Hazard:	No	Immediate (Acute) Health Hazard:	Yes
Reactivity Hazard:	No	Delayed (Chronic) Health Hazard:	Yes
Sudden Release of Pressure Hazard:	No		

NFPA Hazards:	Health: 3	Flammability: 1	Reactivity: 0
HMIS Hazards:	Health: 3	Flammability: 1	Reactivity: 1

STATE REGULATIONS / RIGHT TO KNOW

California Proposition 65: This product contains a chemical or chemicals which are recognized by the State of California to cause cancer, birth defects, or other reproductive harm.

Fiber Optic Center™, Inc. urges each customer or recipient of this MSDS to study it carefully in order to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology, and/or fire prevention, as necessary to use and understand the data contained in this MSDS.

To promote safe handling, customers and recipients should: 1 – notify their employees, agents, contractors, and others whom they know or suspect will use this material or the information in this MSDS and any other information regarding hazards or safety; 2 – furnish this same information to each of their customers for the product; and 3 – request their customers to notify their employees, customers and other users of the product of this information.

The information contained herein is based on the data available to **Fiber Optic Center™, Inc.**, and is believed to be correct. However, **Fiber Optic Center™, Inc.** makes no warranty, expressed or implied, regarding the accuracy of this data or the results to be obtained from the use thereof. **Fiber Optic Center™, Inc.** assumes no responsibility for injury from the use of the product described herein.

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