

MATERIAL SAFETY DATA SHEET

Glass Etching Solution

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 material. Please read the information on these sheets before attempting to use the material. You must also provide this information to those people at your company whose responsibility it is to comply with Federal U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) and State "Right to Know" regulations. Also make sure this information is made available and is disseminated to your employees before use of the product. This information should be kept on file and made available to any employee whom requests it. It is your obligation to comply with the act.

SECTION 1 - IDENTIFICATION

Distributor's Name Chem Etch Manufacturing Inc.
 Address (Street, City, State, Zip) P.O. Box 924231 Houston, TX 77292
 Company Phone Number (832) 606.0290
 Emergency Phone Number (832) 606.0290
 Chemical Name (Synonym) Chemical Mixture
 Trade Name (Synonym) Glass Etching Solution
 Date August 8, 2006

SECTION II - HAZARDOUS INGREDIENTS

HEALTH 3	FLAMMABILITY 0	REACTIVITY 2
<u>INGREDIENT</u>	<u>CASE NO.</u>	<u>TLV UNITS</u>
Ammonium Bifluoride	001341-49-7	3PPM as F 25PPM as NH3
Ethoxylated Alkyl Amines	N/A	N/A

SECTION III - PHYSICAL DATA (Typical)

Boiling Point 258 Deg F
 Specific Gravity (H2O=1) 1.3
 Vapor Density N/A
 Solubility in Water The thickeners do not allow the product to become soluble, but the product can be diluted in water.
 Evaporation Rate Slower than Ether
 Appearance & Odor Pink with a pungent odor.
 Freeze Point 30°F

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point N/A
 Flammable Limits N/A
 Extinguishing Media CO2, Foam, Water, Dry Chemical
 Special Fire Fighting Procedures Product is not a fire hazard. Release of toxic emissions from large quantities is possible and breathing apparatus should be worn.
 Unusual Fire Fighting Hazards Not a fire or explosive hazard, upon contact with most metals. Closed container may explode when exposed to extreme heat.
 Explosion Data Material does not have explosive properties

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SECTION V – HEALTH FIRST AID MEASURES

EYES **Flush eyes with cool water for 30 minutes.** Get medical attention immediately.

SYMPTOMS OF CHRONIC EXPOSURE..... Irritation, redness, blurred vision and burning sensation.
Exposure may result in bone changes with associated joint stiffness.

SKIN Remove contaminated clothing and shoes immediately. **Wash with soap and water.** Get medical attention if burns or irritation persists. Burns may not be noticeable immediately.

INHALATION..... Remove to fresh air call a doctor immediately. If breathing has stopped give artificial respiration. Get medical attention.

INGESTION **Do Not Induce Vomiting,** call a doctor immediately. Report ingestion of product by
Chemical name and family.

SECTION VI – REACTIVITY DATA

Chemical Stability Stable

Incompatibility High alkaline products or oxidizing materials: Alkali or alkaline earth metals.

Thermal Decomposition Hydrofluoric acids, Oxides of nitrogen and ammonia.

Polymerization. Will not occur

SECTION VII – SPILL OR LEAK PROCEDURES

WASTE DISPOSAL METHOD Disposal to be in accordance with local, state and federal regulations. Waste may qualify as hazardous under RCRA.

ACCIDENTAL SPILL..... Zone off contaminated area. Neutralize to Ph7 with soda ash or lime. Flush area from up wind with water from safe distance to sewer.

SECTION VIII – PROTECTIVE EQUIPMENT TO BE USED

EYE PROTECTION..... **Safety glasses**

GLOVES PROTECTION..... **Yes**

CLOTHING RECOMMEDATION .. **N/A**

SECTION IX – HANDLING AND STORAGE

PRECAUTIONS FOR HANDLING

AND STORAGE Handle with caution. Must wear chemical resistant rubber gloves when handling. May be stored in a cool dry room. Do not allow freezing. Always screw caps tightly. **Never force chemical out of bottle.**

SECTION X – GENERAL INFORMATION

We believe that the information contained herein is current as of the date of the Material Safety Data Sheet. Although it is probable that this mixture itself has not been tested as to what hazards may be present, OSHA Section 1910.1200 has been applied. This states that if one or more hazardous components are present at a level of 1.0 % (or greater, then the mixture is presumed to have all the health hazards of components. Since the use of the product is not within the control of Chem Etch Manufacturing Inc., it is the users obligation to determine the conditions of safe use of the product.