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Safety Data Sheet



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1. Identification

Product Name: XIM 5-GL ETCH-I-M Revision Date: 7/25/2016

Product Identifier: 44086 Supercedes Date: 8/28/2015

Product Use/Class: Etch/Etching Cream

Supplier: Rust-Oleum Corporation Manufacturer: Rust-Oleum Corporation 11 Hawthorn Parkway 11 Hawthorn Parkway

11 Hawthorn Parkway
Vernon Hills, IL 60061

11 Hawthorn Parkway
Vernon Hills, IL 60061

USA

Preparer: Regulatory Department

Emergency Telephone: 24 Hour Hotline: 847-367-7700

USA

2. Hazard Identification

Classification

Symbol(s) of Product



Signal Word Danger

GHS HAZARD STATEMENTS

Acute Toxicity, Oral, category 4 H302 Harmful if swallowed.

Skin Corrosion, category 1B H314 Causes severe skin burns and eye damage.

GHS LABEL PRECAUTIONARY STATEMENTS

P260 Do not breathe dust, fumes, gases, mists, vapors, or spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

GHS SDS PRECAUTIONARY STATEMENTS

P270 Do not eat, drink or smoke when using this product.

P363 Wash contaminated clothing before reuse.

3. Composition/Information On Ingredients

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HAZARDOUS SUBSTANCES

<u>Chemical Name</u>	CAS-No.	Wt.% Range	GHS Symbols	GHS Statements
Ammonium Bifluoride	1341-49-7	10-25	GHS05-GHS06	H301-314
Sodium Bifluoride	1333-83-1	2.5-10	GHS05-GHS06	H301-314
Propylene Glycol Phenyl Ether	770-35-4	1.0-2.5	Not Available	Not Available
Hydrochloric Acid	7647-01-0	0.1-1.0	GHS04-GHS05- GHS06	H280-301-314-331

4. First-aid Measures

FIRST AID - EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes holding eyelids open. Get medical attention. Do NOT allow rubbing of eyes or keeping eyes closed.

FIRST AID - SKIN CONTACT: Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists. Immediately flush skin with plenty of water for at least 15 minutes while removing clothing. Get medical attention immediately. Wash clothing separately before reuse. Destroy contaminated shoes.

FIRST AID - INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. Do NOT use mouth-to-mouth resuscitation. If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately.

FIRST AID - INGESTION: If swallowed, do not induce vomiting. If victim is conscious and alert, give 2 to 4 cupfuls of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Treat symptomatically and supportively. Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

5. Fire-fighting Measures

EXTINGUISHING MEDIA: Alcohol Film Forming Foam, Carbon Dioxide, Dry Chemical, Dry Sand, Water Fog

UNUSUAL FIRE AND EXPLOSION HAZARDS: No unusual fire or explosion hazards noted. Keep containers tightly closed. **SPECIAL FIREFIGHTING PROCEDURES:** Containers can rupture and release highly toxic material if exposed to heat. Substance is non-combustible but reacts with many metals to form explosive hydrogen gas. Use water spray to keep fire-exposed containers cool. Containers may explode when heated.

Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Avoid runoff into sewers and waterways. Provide ventilation and approach spill from upwind using proper personal protective equipment as indicated in Section 8. Carefully neutralize spill with sodium bicarbonate (NaHCO3). Dispose of according to local, state (provincial) and federal regulations. Do not incinerate closed containers. Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust.

7. Handling and Storage

HANDLING: Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and launder before reuse. Use only with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid breathing fumes, vapors, or mist. Avoid contact with eyes, skin and clothing.

STORAGE: Store in a dry, well ventilated place. Keep container tightly closed when not in use.

8. Exposure Controls/Personal Protection

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
Ammonium Bifluoride	1341-49-7	25.0	N.E.	N.E.	N.E.	N.E.
Sodium Bifluoride	1333-83-1	5.0	N.E.	N.E.	N.E.	N.E.
Propylene Glycol Phenyl Ether	770-35-4	5.0	N.E.	N.E.	N.E.	N.E.
Hydrochloric Acid	7647-01-0	1.0	N.E.	N.E.	N.E.	5 ppm

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PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Provide general dilution of local exhaust ventilation in volume and pattern to keep TLV of hazardous ingredients below acceptable limits. Prevent build-up of vapors by opening all doors and windows to achieve crossventilation.

RESPIRATORY PROTECTION: A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

SKIN PROTECTION: Use gloves to prevent prolonged skin contact. Use impervious gloves to prevent skin contact and absorption of this material through the skin. Nitrile or Neoprene gloves may afford adequate skin protection.

EYE PROTECTION: Use safety eyewear designed to protect against splash of liquids.

OTHER PROTECTIVE EQUIPMENT: Refer to safety supervisor or industrial hygienist for further guidance regarding types of personal protective equipment and their applications.

HYGIENIC PRACTICES: Wash thoroughly with soap and water before eating, drinking or smoking. Remove contaminated clothing immediately and launder before reuse.

9. Physical and Chemical Properties

Appearance:	Gel/Paste	Physical State:	Liquid
Odor:	Pungent	Odor Threshold:	N.E.
Relative Density:	1.080	pH:	1.0 - 3.0
Freeze Point, °C:	N.D.	Viscosity:	N.D.
Solubility in Water:	Water Reactive	Partition Coefficient, n-octanol/	ND
Decompostion Temp., °C:	N.D.	water:	N.D.
Boiling Range, °C:	-18 - 241	Explosive Limits, vol%:	0.8 - 14.0
Flammability:	Does not Support Combustion	Flash Point, °C:	94
Evaporation Rate:	Slower than Ether	Auto-ignition Temp., °C:	N.D.
Vapor Density:	Heavier than Air	Vapor Pressure:	N.D.

(See "Other information" Section for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Avoid contact with metals. Avoid contact with strong acid and strong bases.

INCOMPATIBILITY: Product slowly corrodes copper, aluminum, zinc, and galvanized surfaces. Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: Decomposition produces hydrogen chloride, chlorine and hydrogen gases.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

11. Toxicological information

EFFECTS OF OVEREXPOSURE - EYE CONTACT: Substance causes severe eye irritation. Injury may be permanent.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Severely irritating; may cause permanent skin damage.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist. High vapor concentrations are irritating to the eyes, nose, throat and lungs.

EFFECTS OF OVEREXPOSURE - INGESTION: Corrosive and may cause severe and permanent damage to mouth, throat and stomach. Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Repeated exposure to low concentrations of HCl vapor or mist may cause bleeding of nose and gums.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

ACUTE TOXICITY VALUES

The acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Chemical Name	<u>Oral LD50</u>	Dermal LD50	Vapor LC50
1341-49-7	Ammonium Bifluoride	130 mg/kg Rat	N.I.	N.I.
770-35-4	Propylene Glycol Phenyl Ether	2830 mg/kg Rat	N.I.	N.I.
7647-01-0	Hydrochloric Acid	238 - 277 mg/kg Rat	>5010 mg/kg Rabbit	N.I.

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N.I. - No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Product is a mixture of listed components.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of material in accordance to local, state, and federal regulations and ordinances. Do not allow to enter waterways, wastewater, soil, storm drains or sewer systems.

14. Transport Information

	Domestic (USDOT)	International (IMDG)	<u>Air (IATA)</u>	TDG (Canada)
UN Number:	UN1760	UN1760	UN1760	UN1760
Proper Shipping Name:	Corrosive Liquid, n.o.s. (Ammonium Bifluoride, Sodium Bifluoride)			
	Socialii Billaoliae)	Socialii Billaonae)	Socialii Billaoriae)	Socialii Billaonae)
Hazard Class:	8	8	8	8
Packing Group:	II	II	II	II
Limited Quantity:	No	No	Cargo Aircraft Only	No

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Reactive Hazard, Acute Health Hazard, Chronic Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

Chemical NameCAS-No.Sodium Bifluoride1333-83-1Hydrochloric Acid7647-01-0

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

Chemical NameCAS-No.Acrylamide79-06-1

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16. Other Information

HMIS RATINGS

Health: 3* Flammability: 1 Physical Hazard: 0 Personal Protection: X

NFPA RATINGS

Health: 3 Flammability: 1 Instability 0

VOLATILE ORGANIC COMPOUNDS, g/L: 266

SDS REVISION DATE: 7/25/2016

REASON FOR REVISION: Product Composition Changed

Substance and/or Product Properties Changed in Section(s):

05 - Fire-fighting Measures

09 - Physical & Chemical Properties

14 - Transport Information 15 - Regulatory Information 16 - Other Information Statement(s) Changed

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

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