Safety Data Sheet

RUST-OLEUM CORPORATION
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1. Identification

Product Name: XIM QT 4PK ETCH-I-M

Revision Date: 4/16/2018

Product Identifier: 44082

Supercedes Date: 7/25/2016

Product Use/Class: Etch/Etching Cream

Supplier:
Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Manufacturer:
Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, IL 60061
USA

Preparer: Regulatory Department

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

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

P264	Wash hands thoroughly after handling.
P501	Dispose of contents/container in accordance with local, regional and national regulations.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P260	Do not breathe dust/fume/gas/mist/vapors/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.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
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	If exposed immediately call a POISON CENTER or doctor/physician.
P321	For specific treatment see label
P405	Store locked up.

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

HAZARDOUS SUBSTANCES

Chemical Name	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
Dipropylene Glycol Monomethyl Ether	34590-94-8	2.5-10	Not Available	Not Available
Propylene Glycol Phenyl Ether	770-35-4	1.0-2.5	GHS06	H331
Hydrochloric Acid	7647-01-0	0.1-1.0	GHS04-GHS05-GHS06	H280-301-314-331
Glycol Ether	PROPRIETARY	<0.1	Not Available	Not Available
Aliphatic Alcohol	PROPRIETARY	<0.1	Not Available	Not Available

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.

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: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention. If swallowed, rinse mouth with water. If feeling unwell, get medical attention.

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. FLASH POINT IS TESTED TO BE GREATER THAN 200 DEGREES F.

SPECIAL FIREFIGHTING PROCEDURES: Water may be used to cool closed containers to prevent buildup of steam. If water is used, fog nozzles are preferred.

Special Fire and Explosion Hazard (Combustible Dust): No Information

6. Accidental Release Measures

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container, and unused contents in accordance with local, state, and federal regulations. Do not incinerate closed containers

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 SDS and 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.

Advice on Safe Handling of Combustible Dust: No Information

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.
Dipropylene Glycol Monomethyl Ether	34590-94-8	5.0	100 ppm	150 ppm	100 ppm	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
Aliphatic Alcohol	PROPRIETARY	0.1	N.E.	N.E.	N.E.	N.E.
Glycol Ether	PROPRIETARY	0.1	N.E.	N.E.	N.E.	N.E.

PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Prevent build-up of vapors by opening all doors and windows to achieve cross-ventilation.

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. 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.

Engineering Measures for Combustible Dust: No Information

9. Physical and Chemical Properties

Appearance:	Gel/Paste	**Physical State:**	Liquid
Odor:	Pungent	**Odor Threshold:**	N.E.
Relative Density:	1.069	**pH:**	1.0 - 3.0
Freeze Point, °C:	N.D.	**Viscosity:**	N.D.
Solubility in Water:	Water Reactive	**Partition Coefficient, n-octanol/ water:**	N.D.
Decompostion Temp., °C:	N.D.		
Boiling Range, °C:	100 - 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: No Information

INCOMPATIBILITY: Incompatible with strong oxidizing agents, strong acids and strong alkalies.

HAZARDOUS DECOMPOSITION: When heated to decomposition, it emits acrid smoke and irritating fumes.

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: Irritating, and may injure eye tissue if not removed promptly.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: Low hazard for usual industrial handling or commercial handling by trained personnel.

EFFECTS OF OVEREXPOSURE - INHALATION: High gas, vapor, mist or dust concentrations may be harmful if inhaled. Avoid breathing fumes, spray, vapors, or mist.

EFFECTS OF OVEREXPOSURE - INGESTION: Substance may be harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: No Information

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	Oral LD50	Dermal LD50	Vapor LC50
1341-49-7	Ammonium Bifluoride	130 mg/kg Rat	N.E.	N.E.
1333-83-1	Sodium Bifluoride	80 mg/kg Rat	N.E.	N.E.
34590-94-8	Dipropylene Glycol Monomethyl Ether	5350 mg/kg Rat	9500 mg/kg Rabbit	N.E.
770-35-4	Propylene Glycol Phenyl Ether	2830 mg/kg Rat	>2000 mg/kg Rabbit	>5.4 mg/L Rat
7647-01-0	Hydrochloric Acid	238 - 277 mg/kg Rat	>5010 mg/kg Rabbit	N.E.

N.E. - Not Established

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)	Air (IATA)	TDG (Canada)
UN Number:	UN1760	UN1760	UN1760	UN1760
Proper Shipping Name:	Corrosive liquid, n.o.s., (Ammonium bifluoride, Sodium bifluoride)	Corrosive liquid, n.o.s., (Ammonium bifluoride, Sodium bifluoride)	Corrosive liquid, n.o.s., (Ammonium bifluoride, Sodium bifluoride)	Corrosive liquid, n.o.s., (Ammonium bifluoride, Sodium bifluoride)
Hazard Class:	8	8	8	8
Packing Group:	II	II	II	II
Limited Quantity:	Yes	Yes	Cargo Aircraft Only	Yes

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:

No Information

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 Name	CAS-No.
Sodium Bifluoride	1333-83-1
Hydrochloric Acid	7647-01-0
Glycol Ether	PROPRIETARY

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:

No TSCA 12(b) components exist in this product.

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: 260

SDS REVISION DATE: 4/16/2018

REASON FOR REVISION:

Regulatory Formula Source Changed
Substance and/or Product Properties Changed in Section(s):
02 - Hazard Identification
03 - Composition/Information on Ingredients
08 - Exposure Controls/Personal Protection
11 - Toxicological Information
15 - Regulatory Information
16 - Other Information
Product Composition Changed
Substance Chemical Name Changed
Substance Hazardous Flag Changed
Substance Hazard Threshold % Changed
Statement(s) Changed

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

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