

Issue Date 01-Oct-2013

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Version 1.0

1. IDENTIFICATION

Product Identifier

Product Name Rust Removing Sour

Other Means of Identification

Product Code 440400

Recommended use of the Chemical and Restrictions on Use

Recommended Use Laundry destainer. For industrial use.

Details of the Supplier of the Safety Data Sheet

Midlab, Inc.
140 Private Brand Way
Athens, TN 37303

Emergency Telephone Number

Company Phone Number Phone: 1-423-337-3180
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Colorless

Physical State Liquid

Odor None

Classification

Acute toxicity - Oral	Category 4
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Corrosive to Metals	Category 1

Signal Word

Danger

Hazard Statements

Harmful if swallowed.
Toxic in contact with skin.
Toxic if inhaled.
Causes severe skin burns and eye damage.
May be corrosive to metals.



Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection.
Wash face, hands and any exposed skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Do not breathe dust/fume/gas/mist/vapors/spray.
Use only outdoors or in a well-ventilated area.
Keep only in original container.

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

IF ON SKIN: Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Call a POISON CENTER or doctor/physician if you feel unwell.

Specific measures: Remove from exposure and apply calcium gluconate gel 2.5%.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

IN CASE OF SPILL: Absorb spillage to prevent material damage.

Precautionary Statements - Storage

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

Store in corrosive resistant container with a resistant inner liner.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Other Hazards

None known.

Unknown Acute Toxicity

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Water	7732-18-5	60-100
Hydrofluoric Acid	7664-39-3	5-10
Ammonium Bifluoride	1341-49-7	3-7

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret

4. FIRST-AID MEASURES

First Aid Measures

General Advice

If exposed or concerned: Get medical advice/attention. When seeking medical attention, emphasize exposure to hydrofluoric acid.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove and discard contact lenses. Get immediate medical advice/attention.

Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing. Wash contaminated clothing before reuse. Get medical attention immediately.

Inhalation

Remove to fresh air. Get medical attention immediately.

Ingestion

Rinse mouth. Drink plenty of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

Most Important Symptoms and Effects

Symptoms

Irritation and corrosive burns to mouth, throat, and stomach. Corrosive to eyes. Prolonged contact may even cause severe skin irritation or mild burn. May cause hypocalcemia. Can also cause bone and joint changes in humans (Fluorosis).

Indication of any Immediate Medical Attention and Special Treatment Needed

Notes to Physician

This product contains hydrofluoric acid.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray (fog). Carbon dioxide (CO₂). Dry chemical. Foam.

Unsuitable Extinguishing Media

Not determined.

Specific Hazards Arising from the Chemical

Contents are corrosive and all personal contact must be avoided.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Use personal protective equipment as required.

Environmental Precautions Avoid release to the environment.

Methods and Material for Containment and Cleaning Up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Collect spillage. Collect in a clean, dry waste container for disposal. Dilute with water and clean up.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling Wash thoroughly after handling. Use personal protection recommended in Section 8. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only in well-ventilated areas.

Conditions for Safe Storage, including any Incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep locked up and out of reach of children. Keep only in original container. Keep from freezing.

Incompatible Materials Acids. Bases. Oxidizing agents. Uncontrolled contact with water.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Hydrofluoric Acid 7664-39-3	TWA: 0.5 ppm F TWA: 2.5 mg/m ³ F S* Ceiling: 2 ppm F	TWA: 3 ppm F TWA: 2.5 mg/m ³ F TWA: 2.5 mg/m ³ dust (vacated) TWA: 3 ppm F (vacated) TWA: 2.5 mg/m ³ (vacated) STEL: 6 ppm F	IDLH: 30 ppm Ceiling: 6 ppm 15 min Ceiling: 5 mg/m ³ 15 min TWA: 3 ppm TWA: 2.5 mg/m ³
Ammonium Bifluoride 71341-49-7	TWA: 2.5 mg/m ³	TWA: 2.5 mg/m ³	-

Appropriate Engineering Controls

Engineering Controls Ventilation systems. Eyewash stations. Showers.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection	Splash goggles or safety glasses.
Skin and Body Protection	Rubber, Nitrile, PVC, or other chemically resistant skin protection to prevent contact.
Respiratory Protection	Ensure adequate ventilation, especially in confined areas.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on Basic Physical and Chemical Properties**

Physical State	Liquid	Odor	None
Appearance	Clear	Odor Threshold	Not determined
Color	Colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	1.0-1.5	
Melting Point/Freezing Point	Not known	
Boiling Point/Boiling Range	100.5 °C / 213 °F	
Flash Point	Not applicable	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	n/a-liquid	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Specific Gravity	1.03	
Water Solubility	Completely soluble	@ 25 °C (77 °F)
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY**Reactivity**

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children. Keep from freezing.

Incompatible Materials

Acids. Bases. Oxidizing agents. Uncontrolled contact with water.

Hazardous Decomposition Products

Thermal decomposition may release toxic ammonia fumes. It may generate toxic fluorides and hydrogen fluorides. Decomposition by reaction with certain metals releases flammable and explosive hydrogen gas.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure**Product Information**

Eye Contact	Causes severe eye damage.
Skin Contact	Causes severe skin burns. Fatal in contact with skin.
Inhalation	Toxic if inhaled.
Ingestion	Harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrofluoric Acid 7664-39-3	LD100 = 80 mg/kg (Guinea Pig) (2% solution)	-	= 850 mg/m ³ (Rat) 1 h = 1276 ppm (Rat) 1 h
Ammonium Bifluoride 1341-49-7	= 31 mg/kg (Rat) (Intraperitoneal)	-	= 1276 ppm (Rat) 1 h

Information on Physical, Chemical and Toxicological Effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure

Carcinogenicity Not a human carcinogen.

Numerical Measures of Toxicity

Not determined

Unknown Acute Toxicity None known.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Harmful to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Hydrofluoric Acid 7664-39-3	-	= 51 mg/L (96hr) Salmo gairdneri	-	= 10.5 mg/L (96hr) Mysidopsis
Ammonium Bifluoride 1341-49-7	-	> 100 mg/L (96hr)	-	-

Persistence/Degradability

Not determined

Bioaccumulation

Not determined

Mobility

Chemical Name	Partition Coefficient
Hydrofluoric Acid 7664-39-3	-1.4

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods**

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Hydrofluoric Acid 7664-39-3	U134			U134

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT UN3264, Corrosive Liquid, Acidic, Inorganic, NOS (Containing Hydrofluoric Acid and Ammonium Bifluoride), 8, PG II

IATA

IMDG Marine Pollutant This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

Not determined

US Federal Regulations

CERCLA

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Hydrofluoric Acid 7664-39-3	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ
Ammonium Bifluoride 1341-49-7	1000lb	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard Yes
Reactive Hazard Yes

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Hydrofluoric Acid	7664-39-3	5-10	1.0
Ammonium Bifluoride	1341-49-7	3-7	1.0

CWA (Clean Water Act)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Hydrofluoric Acid 7664-39-3	100 lb			X

US State Regulations

U.S. State Right-to-Know Regulations

Chemical Name	State List
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Hydrofluoric Acid 7664-39-3	MA, NJ, PA
Ammonium Bifluoride 1341-49-7	MA, NJ, PA

AZ – Arizona Ambient Air Quality Guidelines
 CT – Connecticut Hazardous Air Pollutants
 CA – California Director's List of Hazardous Substances
 CAP65 – California Prop 65
 FL – Florida Substances List
 ID – Idaho Non-Carcinogen Toxic Air Pollutants

IL – Illinois Toxic Air Contaminate
 MA – Massachusetts Right to Know List
 MN – Minnesota Hazardous Substances List
 NJ – New Jersey Right to Know List
 PA – Pennsylvania Right to Know List
 RI – Rhode Island Hazardous Substances List

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards
	Not determined	Not determined	Not determined	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	Personal Protection
	3	0	1	Not determined

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Keep Out of Reach of Children. For Industrial and Institutional Use Only.

*Denotes changes from last version.

End of Safety Data Sheet