

MATERIAL SAFETY DATA SHEET

SECTION I

PRODUCT INFORMATION

Product Name: **Rust Remover**

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Supplied by: **Custodian's Choice**
7 Neilson Street
St. Catharines, ON L2M 5V9

Phone: (905) 682-8888
Fax: (905) 682-7299
Contact: Mr. C. Rogers



Product usage: Rust remover

WHMIS Class: Class E (Corrosive), CLASS D-1A (Immediate and serious toxic effects)

TDG Class: See recent bill of lading for current TDG Class

Poison Control: In Ontario: 1-800 268-9017 In Toronto: 416 813-5900



SECTION II

HAZARDOUS INGREDIENTS

INGREDIENT	CAS#	%	ACGIH-TLV	LC50	LD50
Ammonium bifluoride	1341-49-7	10 - 20	2.5 mg/m3 as F.	Not available	Not available

SECTION III

PHYSICAL DATA

Physical State:	Liquid	Evaporation Rate:	Same as water.
Odour and Appearance:	Odorless, clear colourless liquid	Boiling Point:	100 Deg. C.
Odour Threshold:	Not available	Freezing point:	-10 Deg. C.
Specific Gravity:	1.12 (Water=1)	pH as supplied:	3 - 4
Vapour Pressure:	Not available	pH use dilution:	3 - 4
Vapour Density:	Not available	Water/Oil Dist. Coeff.:	Not available

SECTION IV

FIRE OR EXPLOSION HAZARD

Conditions of Flammability:	Not flammable by WHMIS criteria.	Flash point:	None
Means of Extinction:	Not applicable	Auto-ignition temperature:	Not applicable
Upper flammable limit:	Not applicable	Lower flammable limit:	Not applicable
Hazardous combustion products: Hydrogen fluoride fumes and ammonia gas on heating			
Explosion Data - sensitivity to mechanical impact and static discharge: None			

SECTION V

REACTIVITY DATA

Chemical Unstability:	Product is stable.	Conditions of Reactivity:	None
Incompatibility:	Strong concentrated acids, alkalis, powders, oxidizing and reducing agents as heat and gases may be generated. Contact with metals forms flammable hydrogen gas. Do not mix with chlorine bleach. Product will etch or dissolve glass and silica materials.		
Hazardous Decomposition Products: Hydrogen fluoride fumes and ammonia gas on heating			

SECTION VI

TOXICOLOGICAL PROPERTIES

Route of Entry:	Skin contact, eye contact, inhalation, and ingestion.		
Effects of Acute Exposure			
Skin:	Causes burns which may not be immediately painful or visible. Acid fluorides are absorbed through the skin and attack underlying tissues and bone producing signs of fluorosis such as weight loss, brittleness of bones, anemia, weakness and stiffness of joints.		
Eyes:	May cause severe burns and permanent eye damage.		
Ingestion:	Can cause severe mouth, throat and stomach burns. Can affect kidney function and be fatal if swallowed. Profound and possibly fatal hypocalcemia is likely to occur unless medical treatment is promptly initiated.		
Inhalation:	Mild exposure: Can irritate nose, throat and respiratory system. Severe exposure: Can cause nose and throat burns, lung inflammation and pulmonary edema. Also depletes calcium levels in the body if not promptly treated resulting in death due to hypocalcemia.		
Effects of Chronic Exposure:	Repeated or prolonged contact may lead to fluorosis. Effects may not be immediately apparent, especially with dilute solutions.		
Exposure Limits:	Not available	Irritancy of Product:	Not available
Sensitization:	Not available	Teratogenicity:	Not available
Carcinogenicity:	None	Mutagenicity:	Not available
Reproductive Toxicity:	Not available	Toxicologically Synergistic Products:	Not available

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SECTION VII

PREVENTIVE MEASURES

- Breathing Protection:** Suitable breathing mask or respirator if mists or vapours are present.
- Skin Protection:** Rubber gloves, rubber boots.
- Eye Protection:** Safety glasses with side shields when there is potential for eye contact
- Engineering Controls:** Normal building ventilation is adequate.
- Leak and Spill Procedure:** Refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.
- Waste Disposal:** Review federal, provincial, and local government requirements prior to disposal.
- Storage Requirements:** Keep out of reach of children. Do not freeze. Store in a closed container away from incompatible materials.
- Shipping Information:** Do not freeze.

SECTION VIII

FIRST AID MEASURES

- Skin:** This product contains acid fluoride, dermal exposure to which necessitates the following specific treatment:
- Immediately remove contaminated clothing and continually flush exposed areas of skin with large volumes of water. Rinsing may be limited to 5 minutes if 0.13% benzalkonium chloride solution or 2.5% calcium gluconate gel is available, with the soaks or gel applied as soon as the rinsing is stopped. If not available, rinsing must continue until medical treatment is rendered.
 - Immediately after thorough washing, use one of the measures below:
 - Begin soaking the affected areas in iced 0.13% benzalkonium chloride solution. Use ice cubes, not shaved ice, in order to prevent frostbite. If immersion is not practical, towels should be soaked with iced 0.13% benzalkonium chloride solution and used as compresses for the burned area. Compresses should be changed every 2 to 3 minutes. Soaks or compresses should be continued until pain is relieved or until more definitive medical treatment is provided. Relief of the pain is an indication of the success of treatment; therefore, local anesthetics should be avoided. It is recommended the applier wear chemical protective gloves (e.g. butyl rubber gloves).
 - Gently massage a liberal quantity of calcium gluconate 2.5% gel — commercial preparation, 'HF Antidote Gel' if available or prepare at site by adding 10 mL of 10% calcium gluconate injectable solution to 30 mL of KY jelly or Muko other water soluble gels also suitable. (Note: Taro Gel is physically incompatible with calcium gluconate and must not be used. Do not use calcium chloride as it causes skin necrosis). Apply gel every 15 minutes and massage continuously until pain subsides and/or redness disappears or until medical attention becomes available. It is recommended the applier wear chemical protective gloves, (e.g. butyl rubber gloves).
 - Medical attention must be provided immediately.
 - Exposure to low concentrations may be followed by a delayed onset of symptoms; seek immediate medical attention for all exposures to any concentration of acid fluoride.
- Eyes:** Flush with water running water for 15 minutes lifting the upper and lower eyelids occasionally. Do not use benzethonium chloride solution on eyes. 1 or 2 drops of 0.5% pontocaine hydrochloride solution followed by a second irrigation for 15 minutes. Get medical attention.
- Ingestion:** Get medical attention immediately. Do not induce vomiting. Drink copious amounts of water, milk, lime water, or a solution of calcium gluconate.
- Inhalation:** Move victim to fresh air. Give artificial respiration only if breathing has stopped. Give cardiopulmonary resuscitation (CPR) if there is no breathing and no pulse. Obtain medical attention immediately.

SECTION IX

PREPARATION INFORMATION

Date: 11-Jan-06
Telephone: (905) 682-8888

MSDS Prepared by: Technical Dept.

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