

943613 MATERIAL SAFETY DATA SHEET  
MEDICAL EMERGENCIES ONLY (24 Hour Service): 1-800-328-0026  
Medical Calls from Outside of the USA: 1-651-222-5352  
Textile Care Division Ecolab Inc.  
Ecolab Center St. Paul MN 55102  
Product Information: 1-800-553-8683 Issue Date: July 13, 2000

**1.0 IDENTIFICATION /****1.1 Product Name:** ERUSTICATOR

1.2 Product Type: Liquid Hydrofluoric Acid Laundry Rust Remover

1.3 Hazard Rating: Health: 3 Fire: 0 Reactivity: 0

Substances Subject to SARA 313 Reporting Are Indicated by "#"

**2.0 HAZARDOUS COMPONENTS /**

	CAS No.	%	PEL	TWA
2.1 # Hydrofluoric acid (HF)	7664-39-3	11	3ppm	No*
			*ACGIH STEL = 3ppm C	
2.2 Ammonium bifluoride	1341-49-7	20-50	2.5*	2.5*
			*As fluoride	

STEL = ACGIH short term exp. limit (15 min) PEL - OSHA 8 hr ave in air  
TWA = ACGIH 8 hr average C = ceiling limit in air, do not exceed

**3.0 PHYSICAL DATA /**

3.1 Appearance: Clear, colorless liquid; sharp acid odor  
3.2 Solubility in Water: Mixes with water in all proportions  
3.3 pH: <1.0 (100%)  
3.4 Initial Boiling Point: 180 deg F / 82 deg C  
3.5 Specific Gravity: 1.135 @ 75 deg F / 24 deg C

**4.0 FIRE AND EXPLOSION DATA /**

4.1 Special Fire Hazards: High temperatures may release hazardous decomposition products including corrosive hydrogen fluoride gas.  
4.2 Fire Fighting Methods: Use method appropriate for surrounding fire.

**5.0 REACTIVITY DATA /**

5.1 Stability: Stable under normal conditions of use and handling.  
5.2 Conditions to Avoid: Dilute product by slowly adding to water.  
Reacts with metals; reacts vigorously with alkaline chemicals. Do not mix with chlorinated products - will cause hazardous vapors.

**6.0 SPILL OR LEAK PROCEDURES / USE PROPER PROTECTIVE EQUIPMENT**

Cleanup: PREVENT SKIN CONTACT. Dike or dam large spills. Pump to containers or soak up on inert absorbent. Flush residue or small spills to sanitary sewer.

Waste Disposal: Consult state/local authorities for limits on chemical waste disposal. Unused product is RCRA Corrosive (D002).

**7.0 HEALTH HAZARD DATA /**

DANGER - Contains Hydrogen Fluoride

**7.1 Effects of Overexposure to Concentrate:**

Eyes: CAUSES SEVERE CHEMICAL BURNS. May cause blindness.

Skin: CAUSES SEVERE CHEMICAL BURNS.

If Swallowed: HARMFUL OR FATAL. Causes chemical burns of mouth, throat and stomach.

If Inhaled: Dusts cause irritation, including a burning taste, sneezing, coughing and difficulty breathing. People with asthma or other lung problems may be more affected. Chronic inhalation or short periods at high levels may cause pulmonary edema.

7.2 Chronic low level exposure may result in mottling of teeth, joint stiff

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#### 8.0 FIRST AID /

- 8.1 Eyes: Flush at once with cool running water. Remove contact lenses. Continue flushing for 30 minutes, holding eyelids apart so as to rinse entire eye. SEEK MEDICAL ATTENTION IMMEDIATELY.
- 8.2 Skin: Immediately flush skin with plenty of cool running water while and flush for 15 minutes. Apply calcium gluconate gel, if available,
- 8.3 If Swallowed: Immediately rinse mouth; then drink 2 glasses of milk, if available, or water. If available, take several calcium antacid tablets (eg TUMS) or several tablespoons of milk of magnesia. DO NOT induce vomiting. NEVER give anything by mouth to an unconscious person. SEEK MEDICAL ATTENTION IMMEDIATELY.
- 8.4 If Inhaled: Immediately move to fresh air.

GET IMMEDIATE MEDICAL ATTENTION TO TREAT ANY CONTACT WITH HYDROGEN FLUORIDE 1-800-328-0026, A POISON CONTROL CENTER, OR A PHYSICIAN

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#### 9.0 PROTECTIVE MEASURES /

- 9.1 FOR CONCENTRATE:
- Eyes: Wear chemical splash goggles. For continued or severe exposure wear a face shield over the goggles.
- Skin: Wear any industrial rubber gloves, synthetic apron, other protective equipment as necessary to prevent skin contact.
- Respiratory: Avoid breathing mists or vapors of this product.
- Note: Provide access to emergency eye wash and shower.

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#### 10.0 ADDITIONAL INFORMATION /

- 10.1 Purpose of 7/13/2000 issue: Periodic review, add line 1.3; QC and editorial update. Replaces December 14, 1994 issue.

KEEP OUT OF REACH OF CHILDREN

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