# MATERIAL SAFETY DATA SHEET

Manufactured by:

# Anderson

# **53** SURFLEX® Chemical Company

325 SOUTH DAVIS AVENUE LITCHFIELD, MINNESOTA 55355 (320) 693-2477



Product Finale

Revised: 7/31/2006

24-HOUR EMERGENCY PHONE #: 1-800-424-9300 (CHEMTREC) Supersedes: 9/2/2005

# I. IDENTIFICATION

**Chemical Name And Synonyms:** 

**DOT Shipping Name** 

Not applicable

Acid

Fluorosilicic Acid, Solution

**Chemical Family:** 

**DOT Hazard Class & I.D. Number** 

PG

Corrosive Material UN1778

HAZARDOUS INGREDIENTS

Component	CAS NO.	%	TLV	PEL	Toxic	Hazard
Hydrofluorosilicic Acid	16961-83-4	9-11	2.5mg/m3	2.5mg/m3	NA	Severe irritant to eyes, skin, mucous membranes.
Isopropanol	67-63-0	2-3	400 ppm	400 ppm	NA	Flammable
Trade Secret	TSRN 4130		NE	NE	NA	May cause severe and eye irritation.
Trade Secret	TSRN 9190		NE	NE	NA	May cause severe and eye irritation, possible burns.

<sup>\*\*</sup>Toxic chemical subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR §372). NA: Not applicable NE: Not established

#### III. PHYSICAL DATA

Boiling Point: Not established Form: Liquid pH, 1% Soln.: 1.9

Specific Gravity: 1.090 Solubility In Water: Complete Appearance: Opaque, pink liquid Odor: Floral

# IV. FIRE AND EXPLOSION HAZARD DATA

Flashpoint: 140°F - 150°F

Extinguishing Media: Dry chemical, water fog, alcohol foam

Special Fire

Fighting Procedures: Although this product is not combustible, if a fire occurs in the near vicinity good fire fighting practice dictates the use of self-contained

breathing apparatus and other protective, acid-proof gear.

**Unusual Fire And** 

Explosion Hazards: Reacts with many metals to produce flammable and explosive hydrogen gas. Keep container cool with water, using fog nozzles, as

decomposition will occur above 222°F and produce toxic and corrosive fumes of fluoride.

#### V. HEALTH HAZARD DATA

Carcinogenic: The raw materials used in this product are not considered to be a carcinogen by ACGIH and OSHA.

Effects Of Over-exposure: Liquid or vapors can cause severe irritation and burns which may not be apparent for hours. Can cause severe irritation to the lungs, nose and throat. If swallowed, can cause severe damage to throat and stomach. Prolonged exposure could result in bone changes, corrosive effect on mucous membranes including ulceration of nose, throat and bronchial tubes, cough, shock, pulmonary edema, Fluorosis, coma

and death.

**Emergency And First** 

Aid Procedures: EYES: Immediately flush with water for 15 minutes, lifting the upper and lower eyelids occasionally. Medical attention should be given as

soon as possible.

SKIN: Immediately flush with water for at least 15-20 minutes while removing contaminated clothing and shoes, paying particular attention to skin under the nails. Always get medical attention no matter how minor skin burns appear. Wash contaminated clothing before reuse, but destroy contaminated shoes.

INGESTION: Do not induce vomiting. If conscious, give large quantities of water to dilute the acid. Get medical attention immediately. Do

not give anything by mouth to an unconscious person.

INHALATION: Remove exposed person to an uncontaminated area immediately. If breathing has stopped, start artificial respiration at once.

Oxygen should be provided for an exposed person having difficulty breathing (but only by an authorized person)until exposed person is able

to breathe easily by themselves. Exposed person should be examined by a physician.

NOTES TO PHYSICIAN: Beware of late onset of pulmonary edema for up to 48 hours. Treat severe burns similar to hydrofluoric acid

\* NFPA/HMIS Degree or Hazard: 4 = Extreme; 3 = High; 2 = Moderate; 1 = Slight; 0 = Insignificant.

\*\*Continued On Bac\*\*

HMIS A. Safety Glasses B. Safety Glasses, Gloves C. Safety Glasses, Gloves, Apron D. Face Shield, Gloves, Apron E. Safety Glasses, Gloves, Dust Respirator F. Safety Glasses, Gloves, Apron, Dust Respirator G. Safety Glasses, Gloves, Vapor Respirator H. Splash Goggles, Gloves, Apron, Vapor Respirator I. Safety Glasses, Gloves, Vapor and Dust Respirator F. Air Line, Hood or Mask, Gloves, Full Suit, Boots X. Ask your supervisor for guidance. Continued On Back Page 2; Product Name: Finale

#### VI. REACTIVITY DATA

Stability - Unstable: Stable: X

Conditions To Avoid: Heat, sparks, and open flames.

Incompatibility: Alkalis, oxidizing materials (ie. hypochlorites), strong concentrated acids. Also; glass, metals and stoneware.

(Materials To Avoid)

Hazardous

Decomposition Products: When heated to decomposition (222°F), it emits highly toxic and corrosive fumes of hydrofluoric acid, silicon tetrafluoride and

hydrogen gas. Oxides of carbon, sulfur and nitrogen.

# VII. SPILL OR LEAK PROCEDURES

#### Steps To Be Taken In Case Material Is Released Or Spilled:

Small Spills: Wear appropriate protective equipment. Contain material. Neutralize with water and lime (hydrated lime) and flush to drain.

Keep unnecessary people away. Stay upwind, keep out of low areas. Isolate hazard area and deny entry.

Large spills: Any personnel in area should wear a NIOSH approved air supplied acid suit. Dike area to contain material. Do not allow solution to enter sewers or surface water. Neutralize the spill with water and lime (hydrated lime). Take up with sand or noncombustible absorbent material and place in containers for later disposal. Provide ventilation and be wary of hydrogen generated upon contact with some metals.

Waste Disposal Method: Dispose of in accordance with local, state, and federal regulations.

#### VIII. SPECIAL PROTECTION INFORMATION

Respiratory Protection: If use conditions generate vapors or mists, wear a NIOSH approved respirator appropriate for those emission levels.

Ventilation: Local mechanical exhaust ventilation capable of maintaining emissions at the point of use below the PEL.

Protective Gloves: Acid resistant gloves.

**Eye Protection:** Chemical goggles; full faceshield if use conditions warrant.

**Protective Clothing:** If contact is possible, wear acid-proof clothing and shoes.

#### IX. SPECIAL PRECAUTIONS

#### Precautions To Be Taken In Handling And Storing:

Store in containers in cool, dry, well ventilated area away from sources of heat or ignition. Keep container tightly closed when not in use. Do NOT store in glass or stoneware. Use non-sparking tools. Keep separate from alkali metals, oxidizing agent, combustible solids and organic peroxides. Do not inhale fumes and prevent skin contact. If pungent, irritating odor can be detected, workers are being overexposed. Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Wear all protective equipment and clothing when handling.

Other Precautions: Eyewash and safety shower facilities should be available where product is stored or handled. Contact lenses should not be worn when handling chemical.

# X. REVISED INFORMATION

MSDS Status: Updated

The opinions expressed herein are those of qualified experts within ANDERSON Chemical Company. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and these opinions and the conditions of use of the product are not within the control of ANDERSON Chemical Company, it is the user's obligation to determine the conditions of safe use of the product.