1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name

SOFT FINISH

Other means of identification

Product Code 256
UN/ID No. UN1778
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Fabric Softener, Neutralizer, Iron Control Agent.
Uses advised against No information available

Manufacturer Address
Anderson Chemical Company, 325 South Davis Avenue, Litchfield, MN 55355 (320-693-2477)

Emergency telephone number
Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Hazard Class</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 1 Sub-category B</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Flammable liquids</td>
<td>Category 4</td>
</tr>
</tbody>
</table>

Label elements

Emergency Overview

Danger

Hazard statements
Causes severe skin burns and eye damage
Combustible liquid

Causes severe irritation and or burns

Appearance aqueous solution
Physical state liquid
Odor Light Floral

Precautionary Statements - Prevention
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Wear protective gloves/protective clothing/eye protection/face protection
Precautionary Statements - Response
Immediately call a POISON CENTER or doctor/physician
Specific treatment (see Section 4 on this label)
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 (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
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
In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other Information
Unknown Acute Toxicity 7.5% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluorosilicic acid</td>
<td>16961-83-4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Isopropanol</td>
<td>67-63-0</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

General advice
Immediate medical attention is required.

Eye contact
Flush immediately with water for 15 minutes. Lift upper and lower eyelids for complete rinsing. Get immediate medical attention.

Skin Contact
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.

Inhalation
Remove victim from immediate source of exposure to fresh air. If breathing is difficult, administer oxygen if available. If victim is not breathing, administer CPR. If individual experiences nausea, headache, or dizziness, get immediate medical attention.

Ingestion
Rinse mouth with water. Give water to dilute. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to a semi-comatose, comatose, convulsing or unconscious person.

Self-protection of the first aider
Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Most important symptoms and effects, both acute and delayed
Symptoms

Corrosive. Contact may cause severe eye irritation, eye burns, and permanent eye damage. Contact may cause severe skin irritation, skin burns, and permanent skin damage. Harmful if inhaled. May cause severe irritation and burns of the nose, throat, and respiratory tract. Harmful if swallowed. May cause severe irritation and burns of the mouth, throat and digestive tract. Symptoms of overexposure may include ulceration of the nose and throat, coughing, salivation, headache, fatigue, dizziness, nausea, shock, and pulmonary edema (accumulation of fluid around the lungs). May lead to coma or death. Onset of symptoms may be delayed. Prolonged or repeated overexposure to fluoride compounds may cause fluorosis. Fluorosis is characterized by skeletal changes, consisting of osteosclerosis (hardening or abnormal density of bone) and osteomalacia (softening of bones) and by mottled discoloration of the enamel of teeth (if exposure occurs during enamel formation). Symptoms may include bone and joint pain and limited range of motion. Conditions aggravated by exposure may include skin and respiratory (asthma-like) disorders.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Beware of late onset of pulmonary edema for up to 48 hours. Treat severe burns similar to hydrofluoric acid exposure.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, CO2, water spray or regular foam.

Large Fire Water spray or fog.

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical

Contact with metals may evolve flammable 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.

Hazardous combustion products When heated to decomposition (222°F), it emits highly toxic and corrosive fumes of hydrofluoric acid, silicon tetrafluoride and hydrogen gas. Oxides of sulfur. Carbon oxides. Nitrogen oxides (NOx).

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

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. Use water spray to cool fire exposed containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate nonessential personnel. Ventilate area. Wear appropriate personal protection equipment.

Environmental precautions See Section 12 for additional ecological information.

Methods for containment Completely contain spilled material with dikes or sand bags, etc.

Methods for cleaning up Recover as much material as possible into containers for disposal or reuse. Remaining material may be diluted with water and neutralized. Flush spill area with water. Neutralization products, both solid and liquid, must be recovered for disposal. Provide ventilation and be wary of hydrogen generated upon contact with some metals.
7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Do not get in eyes, on skin, or clothing. Do not breathe vapors or mists. Do not ingest. Wash thoroughly after handling. Wear protective clothing/equipment. Use with adequate ventilation. If pungent, irritating odor can be detected, workers are being overexposed.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed and properly labeled. Containers that have been emptied will retain product residue and should be handled as if they were full. Store in a cool, dry, well-ventilated place away from incompatible materials. Wash hands before eating, drinking, using tobacco, applying make-up or using the toilet. Do not store, use, and/or consume foods, beverages, tobacco in areas where this product is stored. Avoid contact with heat, sparks and open flames.

Incompatible materials
Avoid contact with metals, stoneware, strong acids and alkalies, explosives, toxicants, readily oxidizable materials, alkali metals, combustible solids, and organic peroxides.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluorosilicic acid</td>
<td>TWA: 2.5 mg/m³ F</td>
<td>TWA: 2.5 mg/m³ F</td>
<td>TWA: 2.5 mg/m³ F</td>
</tr>
<tr>
<td>16961-83-4</td>
<td>TWA: 2.5 mg/m³ dust</td>
<td>(vacated) TWA: 2.5 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Isopropanol</td>
<td>STEL: 400 ppm</td>
<td>TWA: 400 ppm</td>
<td>IDLH: 2000 ppm</td>
</tr>
<tr>
<td>67-63-0</td>
<td>TWA: 200 ppm</td>
<td>TWA: 980 mg/m³</td>
<td>TWA: 400 ppm</td>
</tr>
<tr>
<td></td>
<td>(vacated) TWA: 400 ppm</td>
<td>(vacated) TWA: 980 mg/m³</td>
<td>TWA: 980 mg/m³</td>
</tr>
<tr>
<td></td>
<td>(vacated) STEL: 500 ppm</td>
<td>(vacated) STEL: 1225 mg/m³</td>
<td>STEL: 500 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STEL: 1225 mg/m³</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Shower
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles).

Skin and body protection
Wear protective gloves and protective clothing.

Respiratory protection
If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations
Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state
liquid
### 10. STABILITY AND REACTIVITY

**Reactivity**
- No data available

**Chemical stability**
- Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**
- None under normal processing.

**Conditions to avoid**
- Heat, flames and sparks.

**Incompatible materials**
- Avoid contact with metals, stoneware, strong acids and alkalies, explosives, toxicants, readily oxidizable materials, alkali metals, combustible solids, and organic peroxides.

**Hazardous Decomposition Products**
- When heated to decomposition (222°F), it emits highly toxic and corrosive fumes of hydrofluoric acid, silicon tetrafluoride and hydrogen gas.

### 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**
- **Product Information**
  - No data available
**Inhalation**
May cause irritation of respiratory tract. Causes burns.

**Eye contact**
Risk of serious damage to eyes.

**Skin Contact**
Contact causes severe skin irritation and possible burns.

**Ingestion**
May be fatal if swallowed.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluorosilicic acid</td>
<td>= 125 mg/kg (Rat)</td>
<td>-</td>
<td>= 1.11 mg/L (Rat) 1 h</td>
</tr>
<tr>
<td>16961-83-4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isopropanol</td>
<td>= 4396 mg/kg (Rat)</td>
<td>= 12800 mg/kg (Rabbit)</td>
<td>= 16000 ppm (Rat) 8 h</td>
</tr>
<tr>
<td>67-63-0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Information on toxicological effects**

**Symptoms**
No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization**
No information available.

**Germ cell mutagenicity**
No information available.

**Carcinogenicity**
No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluorosilicic acid</td>
<td>-</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>16961-83-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isopropanol</td>
<td>-</td>
<td>Group 3</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>67-63-0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Reproductive toxicity**
No information available.

**STOT - single exposure**
No information available.

**STOT - repeated exposure**
No information available.

**Aspiration hazard**
No information available.

**Numerical measures of toxicity - Product Information**

**Unknown Acute Toxicity**
7.5% of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral)
9361 mg/kg

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

7.5% of the mixture consists of components(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluorosilicic acid</td>
<td>-</td>
<td>65: 96 h Poecilia reticulata mg/L LC50 static 28.7: 96 h Pimephales promelas mg/L LC50 static</td>
<td>-</td>
</tr>
<tr>
<td>16961-83-4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isopropanol</td>
<td>1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96 h Pimephales promelas mg/L LC50 static 1400000: 96 h Lepomis macrochirus µg/L LC50</td>
<td>13299: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>67-63-0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Persistence and degradability**
No information available.

**Bioaccumulation**
No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluorosilicic acid</td>
<td></td>
</tr>
<tr>
<td>Isopropanol</td>
<td></td>
</tr>
</tbody>
</table>
Isopropanol 67-63-0 0.05

Other adverse effects  No information available

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  Do not reuse container.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluorosilicic acid</td>
<td>Toxic, Corrosive</td>
</tr>
<tr>
<td>16961-83-4</td>
<td></td>
</tr>
<tr>
<td>Isopropanol</td>
<td>Toxic, Ignitable</td>
</tr>
<tr>
<td>67-63-0</td>
<td></td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT  Regulated

UN/ID No.  UN1778

Proper shipping name  Fluorosilicic Acid, Solution

Hazard Class  8

Packing Group  II

15. REGULATORY INFORMATION

International Inventories

TSCA  Complies

DSL/NDSL  Complies

EINECS/ELINCS  Complies

ENCS  Does not comply

IECSC  Complies

KECL  Complies

PICCS  Does not comply

AICS  Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

Page 7 / 8
SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropanol - 67-63-0</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**SARA 311/312 Hazard Categories**

- **Acute health hazard**: Yes
- **Chronic Health Hazard**: No
- **Fire hazard**: No
- **Sudden release of pressure hazard**: No
- **Reactive Hazard**: No

**CWA (Clean Water Act)**
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations**

**California Proposition 65**
This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluorosilicic acid</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>16961-83-4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isopropanol 67-63-0</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

**U.S. EPA Label Information**
EPA Pesticide Registration Number Not Applicable

**16. OTHER INFORMATION**

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>Personal protection</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>X</td>
</tr>
</tbody>
</table>

Prepared By: Imt
Issue Date: 18-Jun-2014
Revision Date: 18-Jun-2014
Revision Note: No information available

**Disclaimer**
The information provided in this Material 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.

End of Safety Data Sheet