Section 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Common Name/Trade Name</th>
<th>Fluosilicic acid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer</td>
<td>SPECTRUM CHEMICAL MFG. CORP.</td>
</tr>
<tr>
<td></td>
<td>14422 S. SAN PEDRO STREET</td>
</tr>
<tr>
<td></td>
<td>GARDENA, CA 90248</td>
</tr>
<tr>
<td>Commercial Name(s)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Synonym</td>
<td>Hydrogen hexafluorosilicate</td>
</tr>
<tr>
<td>Chemical Name</td>
<td>Not available.</td>
</tr>
<tr>
<td>Chemical Family</td>
<td>Not available.</td>
</tr>
<tr>
<td>Chemical Formula</td>
<td>H2SiF6</td>
</tr>
<tr>
<td>Supplier</td>
<td>SPECTRUM CHEMICAL MFG. CORP.</td>
</tr>
<tr>
<td></td>
<td>14422 S. SAN PEDRO STREET</td>
</tr>
<tr>
<td></td>
<td>GARDENA, CA 90248</td>
</tr>
</tbody>
</table>

Catalog Number(s): FL130
CAS#: 16961-83-4
RTECS: VV8225000
TSCA: TSCA 8(b) inventory: Fluosilicic acid
CI#: Not available.

Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Fluosilicic acid</td>
<td>16961-83-4</td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Toxicological Data on Ingredients: Fluosilicic acid
LD50: Not available.
LC50: Not available.

Section 3. Hazards Identification

Potential Acute Health Effects: Extremely hazardous in case of skin contact (corrosive, irritant), of eye contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (permeator). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Continued on Next Page
**Potential Chronic Health Effects**

- Extremely hazardous in case of skin contact (corrosive, irritant), of eye contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (permeator).
- **CARCINOGENIC EFFECTS:** Not available.
- **MUTAGENIC EFFECTS:** Not available.
- **TERATOGENIC EFFECTS:** Not available.
- **DEVELOPMENTAL TOXICITY:** Not available.

The substance is toxic to lungs, mucous membranes.

Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. Repeated or prolonged inhalation of vapors may lead to chronic respiratory irritation.

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### Section 4. First Aid Measures

#### Eye Contact

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

#### Skin Contact

If the chemical got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible, protecting your own hands and body. Place the victim under a deluge shower. If the chemical got on the victim's exposed skin, such as the hands: Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

#### Serious Skin Contact

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

#### Inhalation

Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

#### Serious Inhalation

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. **WARNING:** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

#### Ingestion

Do not induce vomiting. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

#### Serious Ingestion

Not available.

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### Section 5. Fire and Explosion Data

#### Flammability of the Product

Non-flammable.

#### Auto-Ignition Temperature

Not applicable.

#### Flash Points

Not applicable.

#### Flammable Limits

Not applicable.

#### Products of Combustion

Not available.

#### Fire Hazards in Presence of Various Substances

Not applicable.

#### Explosion Hazards in Presence of Various Substances

Risks of explosion of the product in presence of mechanical impact: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

#### Fire Fighting Media and Instructions

Not applicable.

#### Special Remarks on Fire Hazards

Not available.

#### Special Remarks on Explosion Hazards

Not available.

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*Continued on Next Page*
Section 6. Accidental Release Measures

Small Spill
Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill
Corrosive liquid. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.

Section 7. Handling and Storage

Precautions
Keep container dry. Do not breathe gas/fumes/vapour/spray. Never add water to this product. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. May corrode glass. Store in an appropriate container.

Storage
May corrode glass. Store in an appropriate container. Corrosive materials should be stored in a separate safety storage cabinet or room.

Section 8. Exposure Controls/Personal Protection

Engineering Controls
Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Personal Protection

Personal Protection in Case of a Large Spill
Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits
Not available.

Section 9. Physical and Chemical Properties

Physical state and appearance
Liquid. (Fuming liquid.)

Molecular Weight
144.08 g/mole

pH (1% soln/water)
Not available.

Boiling Point
Decomposes.

Melting Point
-20°C (-4°F)

Critical Temperature
Not available.

Specific Gravity
1.3 (Water = 1)

Vapor Pressure
218 mm of Hg (@ 20°C)

Vapor Density
Not available.

Odor Threshold
Not available.

Water/Oil Dist. Coeff.
Not available.

Ionicity (in Water)
Not available.

Dispersion Properties
See solubility in water.

Solubility
Easily soluble in cold water.

Continued on Next Page
## Section 10. Stability and Reactivity Data

<table>
<thead>
<tr>
<th>Stability</th>
<th>The product is stable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instability Temperature</td>
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<tr>
<td>Conditions of Instability</td>
<td>Not available.</td>
</tr>
<tr>
<td>Incompatibility with various substances</td>
<td>Not available.</td>
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<tr>
<td>Corrosivity</td>
<td>Corrosive in presence of glass.</td>
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<tr>
<td>Special Remarks on Reactivity</td>
<td>Not available.</td>
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<tr>
<td>Special Remarks on Corrosivity</td>
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<tr>
<td>Polymerization</td>
<td>No.</td>
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</table>

## Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Routes of Entry</th>
<th>Dermal contact. Eye contact. Inhalation. Ingestion.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to Animals</td>
<td>LD50: Not available. LC50: Not available.</td>
</tr>
<tr>
<td>Chronic Effects on Humans</td>
<td>The substance is toxic to lungs, mucous membranes.</td>
</tr>
<tr>
<td>Other Toxic Effects on Humans</td>
<td>Extremely hazardous in case of skin contact (corrosive, irritant), of ingestion, of inhalation. Hazardous in case of skin contact (permeator).</td>
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<tr>
<td>Special Remarks on Toxicity to Animals</td>
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<tr>
<td>Special Remarks on Chronic Effects on Humans</td>
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<td>Special Remarks on other Toxic Effects on Humans</td>
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## Section 12. Ecological Information

<table>
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<th>Ecotoxicity</th>
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<tr>
<td>BOD5 and COD</td>
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<tr>
<td>Products of Biodegradation</td>
<td>Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.</td>
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<tr>
<td>Toxicity of the Products of Biodegradation</td>
<td>The products of degradation are more toxic.</td>
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<tr>
<td>Special Remarks on the Products of Biodegradation</td>
<td>Not available.</td>
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</table>
Section 13. Disposal Considerations

Waste Disposal

Section 14. Transport Information

DOT Classification  
CLASS 8: Corrosive liquid.

Identification  
: Fluorosilicic acid   : UN1778   PG: II

Special Provisions for Transport  
Not available.

DOT (Pictograms)

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations  
Massachusetts RTK: Fluosilicic acid  
TSCA 8(b) inventory: Fluosilicic acid

California Proposition 65 Warnings  

Other Regulations  

Other Classifications  
WHMIS (Canada)  
CLASS D-2A: Material causing other toxic effects (VERY TOXIC).  
CLASS E: Corrosive liquid.

DSCL (EEC)  
R35- Causes severe burns.

HMIS (U.S.A.)

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Health</th>
<th>Fire</th>
<th>Reactivity</th>
<th>Personal Protection</th>
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<tbody>
<tr>
<td></td>
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</table>

National Fire Protection Association (U.S.A.)

<table>
<thead>
<tr>
<th>HMIS</th>
<th>NFPA</th>
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<tbody>
<tr>
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<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Specific hazard</th>
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<td>3</td>
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</table>

WHMIS (Canada) (Pictograms)

DSCL (Europe) (Pictograms)

TDG (Canada) (Pictograms)

Continued on Next Page
**Fluosilicic acid**

**Section 16. Other Information**

<table>
<thead>
<tr>
<th>Remarks</th>
<th></th>
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<tbody>
<tr>
<td><strong>MSDS Code</strong></td>
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<td><strong>References</strong></td>
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<tr>
<td><strong>Other Special Considerations</strong></td>
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</table>

Verified by Sonia Owen.  
Printed 9/12/2006.

**Notice to Reader**

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.