**Section 1 - IDENTIFICATION**

Manufacturer Information
Electronic Fluorocarbons LLC
3266 Bergey Road
Hatfield PA 19440

General Information: 1-215-443-9600
Emergency #: 1-800-535-5053
Outside the US: +1-352-323-3500 (Call collect)

Product Identifier: Fluorine

Product Use
Synthetic/Analytical chemistry.

**Section 2 - HAZARDS IDENTIFICATION**

OSHA/HCS Status
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the Substance or Mixture
- OXIDIZING GASES - Category 1
- GASES UNDER PRESSURE - Compressed gas
- ACUTE TOXICITY (inhalation) - Category 1
- SKIN CORROSION/IRRITATION - Category 1
- SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
- SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (respiratory tract) - Category 1

GHS LABEL ELEMENTS
Symbol(s)

Signal Word
DANGER

Hazard Statement(s)
- May cause or intensify fire; oxidizer.
- Contains gas under pressure; may explode if heated. Extremely Reactive.
- Fatal if inhaled.
- Causes severe skin burns and eye damage. Causes serious eye damage.
- Corrosive to the respiratory tract.
Safety Data Sheet

Precautionary Statement(s)

General
Read and follow all Safety Data Sheets (SDS’S) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction. Open valve slowly. Use only with equipment cleaned for Oxygen service. Use only with equipment passivated before use. Use behind barricades with remote extensions on valves and regulators.

Prevention
Wear protective gloves. Wear eye or face protection. Wear respiratory protection. Keep away from clothing, incompatible materials and combustible materials. Keep reduction valves free from grease and oil. Use only outdoors or in a well-ventilated area. Do not breathe gas. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Use and store only outdoors or in a well ventilated place.

Response
In case of fire: Stop leak if safe to do so. IF exposed: Call a POISON CENTER or physician. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. 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 physician.

Storage
Store locked up. Protect from sunlight. Protect from sunlight when ambient temperature exceeds 52°C/125°F. Store in a well-ventilated place.

Disposal
Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards Not Otherwise Classified
In addition to any other important health or physical hazards, this product may displace oxygen and cause rapid suffocation.

***Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS***

<table>
<thead>
<tr>
<th>CAS</th>
<th>Component Name</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>7782-41-4</td>
<td>Fluorine</td>
<td>100</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.
**Section 4 - FIRST AID MEASURES**

**Inhalation**

Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin**

Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Eyes**

Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

**Ingestion**

As this product is a gas, refer to the inhalation section.

**Note to Physicians**

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Protection of First Aiders**

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

**Symptoms: Immediate**

- eye damage, burns, frostbite, fatal if inhaled

**Over-exposure Signs/Symptoms**

- pain, watering, red eyes; skin irritation, redness, blistering; stomach pains

**Section 5 - FIRE FIGHTING MEASURES**

**Suitable Extinguishing Media**

Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable Extinguishing Media**

None Known

**Specific Hazards Arising From the Chemical**

Contains gas under pressure. Oxidizing material. This material increases the risk of fire and may aid combustion. Contact with combustible material may cause fire. In a fire or if heated, a pressure increase will occur and the container may burst or explode.
**Section 6 - ACCIDENTAL RELEASE MEASURES**

**For Non-Emergency Personnel**
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For Emergency Responders**
If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental Precautions**
Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods and Materials for Containment and Cleaning Up**
- **Small Spill**: Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.
- **Large Spill**: Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

**Section 7 - HANDLING AND STORAGE**

**Protective Measures**
Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Do not get in eyes or on skin or clothing. Do not breathe gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep away from clothing, incompatible materials and combustible materials. Keep reduction valves free from grease and oil. Empty containers retain product residue and can be hazardous. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.
Safety Data Sheet

Material Name: Fluorine

Advice on General Occupational Hygiene
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for Safe Storage, Including any Incompatibilities
Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Separate from acids, alkalies, reducing agents and combustibles. Keep container tightly closed and sealed until ready for use. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F).

***Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION***

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>fluorine</td>
<td>ACGIH TLV (United States, 3/2012). STEL: 3.1 mg/m³ 15 minutes. STEL: 2 ppm 15 minutes. TWA: 1.6 mg/m³ 8 hours. TWA: 1 ppm 8 hours. NIOSH REL (United States, 1/2013). TWA: 0.2 mg/m³ 10 hours. TWA: 0.1 ppm 10 hours. OSHA PEL (United States, 6/2010). TWA: 0.2 mg/m³ 8 hours. TWA: 0.1 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 0.2 mg/m³ 8 hours. TWA: 0.1 ppm 8 hours.</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures
Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Material Name: Fluorine

Eye/face protection
Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection
Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection
Appropriate footwear and any additional skin protection measures should be selected.

Respiratory protection
Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Physical State</td>
<td>Gas</td>
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<tr>
<td>Color</td>
<td>Yellowish</td>
</tr>
<tr>
<td>Odor</td>
<td>Pungent odor</td>
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<tr>
<td>pH</td>
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</tr>
<tr>
<td>Boiling Point</td>
<td>-188°C</td>
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<tr>
<td>Decomposition</td>
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<td>LEL</td>
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<td>Vapor Pressure</td>
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<td>Specific Gravity (water=1)</td>
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<td>Log KOW</td>
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<td>Auto Ignition</td>
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<td>Molecular Weight</td>
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<td>Appearance</td>
<td>Pale-yellow to greenish gas</td>
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<td>Physical Form</td>
<td>Gas</td>
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<td>Odor Threshold</td>
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<td>Melting/Freezing Point</td>
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<td>Flash Point</td>
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<td>Evaporation Rate</td>
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<td>UEL</td>
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<td>Vapor Density (air = 1)</td>
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<td>Water Solubility</td>
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<tr>
<td>Molecular Formula</td>
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</table>

**Section 10 - STABILITY AND REACTIVITY**

Chemical Stability
Product is Stable

Conditions to Avoid
No specific data

Possibility of Hazardous Reactions
Contact with combustible materials, risk of causing fire

Incompatible Materials
Reducing materials, combustible materials, organic materials, metals, alkalis and moisture.

Hazardous Decomposition
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous Polymerization
Under normal conditions of storage and use, hazardous polymerization will not occur.
**Section 11 - TOXICOLOGICAL INFORMATION**

### Information on toxicological effects

#### Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>fluorine</td>
<td>LC50 Inhalation Gas.</td>
<td>Rat</td>
<td>185 ppm</td>
<td>1 hours</td>
</tr>
</tbody>
</table>

#### Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>fluorine</td>
<td>Eyes - Mild irritant</td>
<td>Human</td>
<td>-</td>
<td>5 minutes 25 parts per million</td>
<td>-</td>
</tr>
</tbody>
</table>

**Sensitization**

Not available.

**Mutagenicity**

Not available.

**Carcinogenicity**

Not available.

**Reproductive toxicity**

Not available.

**Teratogenicity**

Not available.

**Specific target organ toxicity (single exposure)**

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>fluorine</td>
<td>Category 1</td>
<td>Not determined</td>
<td>respiratory tract</td>
</tr>
</tbody>
</table>

**Specific target organ toxicity (repeated exposure)**

Not available.

**Aspiration hazard**

Not available.

**Information on the likely routes of exposure**

Not available.

**Potential acute health effects**

**Eye contact**

Causes serious eye damage. Contact with rapidly expanding gas may cause burns or frostbite.

**Inhalation**

Fatal if inhaled. May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.

**Skin contact**

Causes severe burns. Contact with rapidly expanding gas may cause burns or frostbite.

**Ingestion**

May cause burns to mouth, throat and stomach. As this product is a gas, refer to the inhalation section.
Safety Data Sheet

Material Name: Fluorine

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact                  pain, watering, redness
Inhalation                   No specific data.
Skin contact                 pain or irritation, redness, blistering may occur
Ingestion                    stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure
Potential immediate effects
Not available.

Potential delayed effects
Long term exposure
Potential immediate effects
Not available.
Potential delayed effects
Not available.
Potential chronic health effects
Not available.

General                      No known significant effects or critical hazards.
Carcinogenicity              No known significant effects or critical hazards.
Mutagenicity                 No known significant effects or critical hazards.
Teratogenicity               No known significant effects or critical hazards.
Developmental effects        No known significant effects or critical hazards.
Fertility effects            No known significant effects or critical hazards.

Numerical measures of toxicity
Acute toxicity estimates     Not available.

Toxicity
Not available

Persistence and Degradability
No data available.

Bioaccumulative Potential
Bioconcentration potential in aquatic organisms is low based on a BCF value of 3.2.

Mobility in Soil
Not available
** *Section 13 - DISPOSAL CONSIDERATIONS* * *

Disposal Methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

United States-RCRA Acute Hazardous Waste "P" List

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS #</th>
<th>Status</th>
<th>Reference number</th>
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<tbody>
<tr>
<td>Fluorine</td>
<td>7782-41-4</td>
<td>Listed</td>
<td>P056</td>
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** *Section 14 - TRANSPORT INFORMATION* * *

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<th>UN number</th>
<th>DOT</th>
<th>TDG</th>
<th>Mexico</th>
<th>IMDG</th>
<th>IATA</th>
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<td>UN1045</td>
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<table>
<thead>
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<th>IATA</th>
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</thead>
<tbody>
<tr>
<td>FLUORINE, COMPRESSED</td>
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<table>
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<th>Transport hazard class(es)</th>
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<th>IATA</th>
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<td>2.3 (5.1, 8)</td>
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<table>
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<tbody>
<tr>
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<table>
<thead>
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<th>Environment</th>
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<tr>
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<table>
<thead>
<tr>
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<th>Mexico</th>
<th>IMDG</th>
<th>IATA</th>
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</thead>
<tbody>
<tr>
<td>Explosive Limit and Limited Quantity Index</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERAP Index</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passenger Carrying Ship Index</td>
<td>Forbidden</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passenger Carrying Road or Rail Index</td>
<td>Forbidden</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Special provisions</td>
<td>38</td>
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<td></td>
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<tr>
<td>Passenger and Cargo Aircraft Quantity limitation: Forbidden</td>
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</tr>
<tr>
<td>Cargo Aircraft Only Quantity limitation: 0 Forbidden</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Safety Data Sheet

Material Name: Fluorine

“Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product.”

Special precautions for user

Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not available.

***Section 15 - REGULATORY INFORMATION***

U.S. Federal regulations

TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): This material is listed or exempted.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)
Clean Air Act (CAA) 112 regulated toxic substances: fluorine
Not listed

Clean Air Act Section 602 Class I Substances
Not listed

Clean Air Act Section 602 Class II Substances
Not listed

DEA List I Chemicals (Precursor Chemicals)
Not listed

DEA List II Chemicals (Essential Chemicals)
Not listed

SARA 302/304
Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>EHS</th>
<th>SARA 302 TPQ</th>
<th>SARA 304 RQ</th>
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<tbody>
<tr>
<td>fluorine</td>
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<td>Yes.</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

SARA 304 RQ Not applicable.

SARA 311/312 Classification Sudden release of pressure, Immediate (acute) health hazard
### Safety Data Sheet

**Material Name:** Fluorine

## Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>fluorine</td>
<td>100</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
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</table>

**SARA 304 RQ**
- Not applicable.

**SARA 311/312**
- Classification: Sudden release of pressure, Immediate (acute) health hazard

## Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
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</thead>
<tbody>
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<td>No.</td>
<td>Yes.</td>
<td>No.</td>
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<td>No.</td>
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### SARA 313

<table>
<thead>
<tr>
<th>Product name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form R - Reporting requirements</td>
<td>fluorine</td>
<td>7782-41-4</td>
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<tr>
<td>Supplier notification</td>
<td>fluorine</td>
<td>7782-41-4</td>
</tr>
</tbody>
</table>

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

### State regulations

- **Massachusetts**: This material is listed.
- **New York**: This material is listed.
- **New Jersey**: This material is listed.
- **Pennsylvania**: This material is listed.
- **Canada inventory**: This material is listed or exempted.

### International regulations

**International Lists**

- **Australia inventory (AICS)**: This material is listed or exempted.
- **China inventory (IECSC)**: This material is listed or exempted.
- **Japan inventory**: Not determined.
- **Korea inventory**: This material is listed or exempted.
- **Malaysia Inventory (EHS Register)**: Not determined.
- **New Zealand Inventory of Chemicals (NZIoC)**: This material is listed or exempted.
- **Philippines inventory (PICCS)**: This material is listed or exempted.
- **Taiwan inventory (CSNN)**: Not determined.
Material Name: Fluorine

Safety Data Sheet

Chemical Weapons Convention List
Schedule I Chemicals
Not listed

Chemical Weapons Convention List
Schedule II Chemicals
Not listed

Chemical Weapons Convention List
Schedule III Chemicals
Not listed

Canada
WHMIS (Canada)

Class A: Compressed gas.
Class D-1A: Material causing immediate and serious toxic effects (Very toxic).
Class E: Corrosive material
Class F: Dangerously reactive material.

CEPA Toxic substances: This material is not listed.
Canadian ARET: This material is not listed.
Canadian NPRI: This material is listed.
Alberta Designated Substances: This material is not listed.
Ontario Designated Substances: This material is not listed.
Quebec Designated Substances: This material is not listed.

** *Section 16 - OTHER INFORMATION* **

NFPA Ratings: Health: 3 Fire: 0 Reactivity: 3
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe
Key / Legend
ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Other Information

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