



Health	1
Fire	0
Reactivity	0
Personal Protection	A

# Material Safety Data Sheet

## Fluoride Standard, 1ml/1mg F MSDS

### Section 1: Chemical Product and Company Identification

**Product Name:** Fluoride Standard, 1ml/1mg F

**Catalog Codes:** SLF1177

**CAS#:** Mixture.

**RTECS:** Not applicable.

**TSCA:** TSCA 8(b) inventory: Sodium fluoride; Water

**CI#:** Not available.

**Synonym:**

**Chemical Name:** Fluoride Standard, 1ml/1mg F

**Chemical Formula:** Not applicable.

**Contact Information:**

**Sciencelab.com, Inc.**

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: [ScienceLab.com](http://ScienceLab.com)

**CHEMTREC (24HR Emergency Telephone), call:**

1-800-424-9300

**International CHEMTREC, call:** 1-703-527-3887

**For non-emergency assistance, call:** 1-281-441-4400

### Section 2: Composition and Information on Ingredients

**Composition:**

Name	CAS #	% by Weight
Sodium fluoride	7681-49-4	0.2-0.24
Water	7732-18-5	99.8-99.8

**Toxicological Data on Ingredients:** Sodium fluoride: ORAL (LD50): Acute: 52 mg/kg [Rat]. 57 mg/kg [Mouse].

### Section 3: Hazards Identification

**Potential Acute Health Effects:**

Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation (lung sensitizer). Non-corrosive for lungs.

**Potential Chronic Health Effects:**

**CARCINOGENIC EFFECTS:** Classified 3 (Equivocal evidence.) by NTP [Sodium fluoride]. **MUTAGENIC EFFECTS:**

Mutagenic for mammalian somatic cells. [Sodium fluoride]. Mutagenic for bacteria and/or yeast. [Sodium fluoride].

**TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not available. The substance may be toxic to kidneys, lungs, the nervous system, heart, gastrointestinal tract, cardiovascular system, bones, teeth. Repeated or prolonged exposure to the substance can produce target organs damage.

### Section 4: First Aid Measures

**Eye Contact:**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

**Skin Contact:**

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

**Serious Skin Contact:** Not available.

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**Serious Inhalation:** Not available.

**Ingestion:**

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

**Serious Ingestion:** Not available.

### 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.

### 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. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:**

Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

### Section 7: Handling and Storage

**Precautions:**

Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible.

**Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.

## 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:** Safety glasses. Lab coat.

**Personal Protection in Case of a Large Spill:**

Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:**

Sodium fluoride TWA: 2.5 Consult local authorities for acceptable exposure limits.

## Section 9: Physical and Chemical Properties

**Physical state and appearance:** Liquid.

**Odor:** Not available.

**Taste:** Not available.

**Molecular Weight:** Not applicable.

**Color:** Not available.

**pH (1% soln/water):** Not Available

**Boiling Point:** The lowest known value is 100°C (212°F) (Water).

**Melting Point:** Not available.

**Critical Temperature:** Not available.

**Specific Gravity:** The only known value is 1 (Water = 1) (Water).

**Vapor Pressure:** The highest known value is 2.3 kPa (@ 20°C) (Water).

**Vapor Density:** The highest known value is 0.62 (Air = 1) (Water).

**Volatility:** 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, hot water.

## Section 10: Stability and Reactivity Data

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Not available.

**Incompatibility with various substances:** Not available.

**Corrosivity:** Non-corrosive in presence of glass.

**Special Remarks on Reactivity:** Not available.

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

## Section 11: Toxicological Information

**Routes of Entry:** Absorbed through skin. Eye contact. Ingestion.

**Toxicity to Animals:**

LD50: Not available. LC50: Not available.

**Chronic Effects on Humans:**

CARCINOGENIC EFFECTS: Classified 3 (Equivocal evidence.) by NTP [Sodium fluoride]. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Sodium fluoride]. Mutagenic for bacteria and/or yeast. [Sodium fluoride]. Contains material which may cause damage to the following organs: kidneys, lungs, the nervous system, heart, gastrointestinal tract, cardiovascular system, bones, teeth.

**Other Toxic Effects on Humans:** Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation

**Special Remarks on Toxicity to Animals:**

Lowest Published Lethal Dose: LDL [Human] - Route: Oral; Dose: 71 mg/kg LDL [Woman] - Route: Oral; Dose: 90 mg/kg LDL [Woman] - Route: Oral; Dose: 360 mg/kg LDL [Mouse] - Route: Skin; Dose: 300 mg/kg (Sodium fluoride)

**Special Remarks on Chronic Effects on Humans:**

May cause adverse reproductive effects (fertility, fetotoxicity), and birth defects based on animal data. May cause cancer based on animal data. May cause genetic (mutagenic) and tumorigenic effects. (Sodium fluoride)

**Special Remarks on other Toxic Effects on Humans:**

Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation Ingestion: Ingestion of large amounts may cause salivation, thirst, nausea, vomiting, hypermotility, diarrhea, and abdominal pain. Contains Fluoride (Sodium Fluoride) which may affect behavior/central nervous system/nervous system (headache, nervousness, dizziness, seizures, convulsions, tremor, muscle weakness, somnolence), respiration (respiratory depression, dyspnea), cardiovascular system (weak pulse, hypotension, dysrhythmias, cardiac arrest), liver, urinary system (polyuria, polydypsia), liver (hepatic enzymes increased, jaundice), brain, metabolism (loss of appetite, hypocalcemia, hyperkalemia, hypomagnesia, ), teeth, bones, and blood (changes in red and white blood cell count, interference in blood coagulation) Inhalation: May cause respiratory tract irritation Chronic Potential Health Effects: Chronic ingestion may cause fluorosis. Effects of fluorosis may include joint pain, weakness, limited joint mobility, brittle bones, ossifications on x-ray, thickening of long bone cortices, calcification of ligaments, osteomalacia, osteosclerosis (skeletal (bone and teeth) abnormalities) and mottled tooth enamel. Other symptoms may include anemia, nausea, vomiting, diarrhea or constipation, kidney damage and weight loss/anorexia. Chronic inhalation may cause bronchitis to develop with cough, phlegm, and/or shortness of breath. (extrapolated from Sodium Fluoride) .

## Section 12: Ecological Information

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The product itself and its products of degradation are not toxic.

**Special Remarks on the Products of Biodegradation:** Not available.

### Section 13: Disposal Considerations

**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

### Section 14: Transport Information

**DOT Classification:** Not a DOT controlled material (United States).

**Identification:** Not applicable.

**Special Provisions for Transport:** Not applicable.

### Section 15: Other Regulatory Information

**Federal and State Regulations:**

Connecticut hazardous material survey.: Sodium fluoride Illinois chemical safety act: Sodium fluoride New York release reporting list: Sodium fluoride Rhode Island RTK hazardous substances: Sodium fluoride Pennsylvania RTK: Sodium fluoride Massachusetts RTK: Sodium fluoride Massachusetts spill list: Sodium fluoride New Jersey: Sodium fluoride New Jersey spill list: Sodium fluoride Louisiana spill reporting: Sodium fluoride TSCA 8(b) inventory: Sodium fluoride; Water TSCA 8(a) PAIR: Sodium fluoride CERCLA: Hazardous substances.: Sodium fluoride: 1000 lbs. (453.6 kg);

**Other Regulations:** Not available

**Other Classifications:**

**WHMIS (Canada):** Not controlled under WHMIS (Canada).

**DSCL (EEC):**

This product is not classified according to the EU regulations. S24/25- Avoid contact with skin and eyes. S36- Wear suitable protective clothing.

**HMIS (U.S.A.):**

**Health Hazard:** 1

**Fire Hazard:** 0

**Reactivity:** 0

**Personal Protection:** a

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

**Health:** 1

**Flammability:** 0

**Reactivity:** 0

**Specific hazard:**

**Protective Equipment:**

Not applicable. Lab coat. Not applicable. Safety glasses.

### Section 16: Other Information

**References:** Not available.

**Other Special Considerations:** Not available.

**Created:** 10/10/2005 10:13 AM

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