

# SAFETY DATA SHEET

Revision Date 19-Dec-2025

Revision Number 6

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

## 1. Identification

**Product Name** Silver(I) fluoride

**Cat No. :** AC210450000; AC210450050; AC210450250

**CAS No** 7775-41-9  
**Synonyms** No information available

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.

### Details of the supplier of the safety data sheet

#### Company

Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

#### **Emergency Telephone Number**

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

## 2. Hazard(s) identification

### Classification

This chemical is considered hazardous according to [US] OSHA (29 CFR 1910.1200, 2024)

Skin Corrosion/Irritation	Category 1 B
Serious Eye Damage/Eye Irritation	Category 1
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Respiratory system.	

### Label Elements

#### **Signal Word**

Danger

#### **Hazard Statements**

Causes severe skin burns and eye damage

May cause respiratory irritation



### Precautionary Statements

#### Prevention

Do not breathe dust/fume/gas/mist/vapors/spray  
Wash face, hands and any exposed skin thoroughly after handling  
Wear protective gloves/protective clothing/eye protection/face protection  
Use only outdoors or in a well-ventilated area

#### Response

Immediately call a POISON CENTER or doctor

#### Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing

#### Skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower  
Take off contaminated clothing and wash before reuse

#### Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

#### Ingestion

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting

#### Storage

Store locked up  
Store in a well-ventilated place. Keep container tightly closed

#### Disposal

Dispose of contents/container to an approved waste disposal plant

#### Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects

#### Hazards classified under paragraph (d)(1)(ii) of 1910.1200

No information available

## 3. Composition/information on Ingredients

Component	CAS No	Weight %
Silver fluoride (AgF)	7775-41-9	> 99

## 4. First-aid measures

#### General Advice

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

#### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

#### Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Call a physician immediately. Dermal burns may be treated with calcium gluconate gel or slurry in water or glycerine. This compound binds the active fluorides in an insoluble form and limits burn extension and pain.

#### Inhalation

Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison

	control center immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
<b>Ingestion</b>	Immediate medical attention is required. Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person.
<b>Most important symptoms and effects</b>	Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation
<b>Notes to Physician</b>	Treat symptomatically

## 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	CO <sub>2</sub> , dry chemical, dry sand, alcohol-resistant foam.
<b>Unsuitable Extinguishing Media</b>	No information available
<b>Flash Point</b>	No information available
<b>Method -</b>	No information available
<b>Autoignition Temperature</b>	No information available
<b>Explosion Limits</b>	
<b>Upper</b>	No data available
<b>Lower</b>	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

### Specific Hazards Arising from the Chemical

The product causes burns of eyes, skin and mucous membranes. Do not allow run-off from fire-fighting to enter drains or water courses.

### Hazardous Combustion Products

Gaseous hydrogen fluoride (HF).

### 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. Thermal decomposition can lead to release of irritating gases and vapors.

### NFPA

**Health**  
3

**Flammability**  
0

**Instability**  
1

**Physical hazards**  
N/A

## 6. Accidental release measures

<b>Personal Precautions</b>	Use personal protective equipment as required. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing.
<b>Environmental Precautions</b>	Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

**Methods for Containment and Clean Up** Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

## 7. Handling and Storage

<b>Handling</b>	Do not get in eyes, on skin, or on clothing. Wear personal protective equipment/face protection. Use only under a chemical fume hood. Do not breathe dust. Do not ingest. If swallowed then seek immediate medical assistance.
-----------------	--

**Storage.**

Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Protect from direct sunlight. Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Strong oxidizing agents. Strong acids.

## 8. Exposure controls / personal protection

**Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH	Mexico OEL (TWA)
Silver fluoride (AgF)	TWA: 0.01 mg/m <sup>3</sup> TWA: 2.5 mg/m <sup>3</sup>	(Vacated) TWA: 0.01 mg/m <sup>3</sup> (Vacated) TWA: 2.5 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup> IDLH: 250 mg/m <sup>3</sup> REL = 0.01 mg/m <sup>3</sup> (TWA)	TWA: 0.01 mg/m <sup>3</sup> TWA: 0.1 mg/m <sup>3</sup> TWA: 2.5 mg/m <sup>3</sup>

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH: NIOSH - National Institute for Occupational Safety and Health

**Engineering Measures**

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment****Eye/face Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection**

Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Recommended Filter type:**

Particulates filter conforming to EN 143.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

Appearance**Physical State**

Powder Solid

**Color**

Brown

**Odor**

Odorless

**Odor Threshold**

No information available

PropertyValues**Melting Point/Range**

435 °C / 815 °F

**Softening Point**

No data available

**Boiling Point/Range**

1150 °C / 2102 °F

**Flash Point**

No information available

**Flammability (liquid)**

Not applicable

**Flammability (solid,gas)**

No information available

**Explosion Limits**

No data available

**Autoignition Temperature**

No data available

**Decomposition Temperature**

No data available

**pH**

No information available

**Viscosity**

Not applicable

**Water Solubility**

Soluble

Remarks• Method

@ 760 mmHg

**Method -** No information available

Solid

Solid

Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/water)		
Vapor Pressure	No data available	
Density / Specific Gravity	5.850	
Bulk Density	No data available	
Vapor Density	Not applicable	Solid
Particle characteristics	No data available	

**Other Information**

Molecular Formula	Ag F
Molecular Weight	126.87
Evaporation Rate	Not applicable - Solid

## 10. Stability and reactivity

Reactive Hazard	None known, based on information available
Stability	Stable under normal conditions. Hygroscopic. Light sensitive.
Conditions to Avoid	Exposure to light. Incompatible products. Exposure to moist air or water.
Incompatible Materials	Strong oxidizing agents, Strong acids
Hazardous Decomposition Products	Gaseous hydrogen fluoride (HF)
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

## 11. Toxicological information

**Information on expected route of exposure**

Inhalation	Avoid breathing dust or spray mist. May be harmful if inhaled.
Ingestion	May be harmful if swallowed.
Eyes	Avoid contact with eyes. Corrosive to the eyes and may cause severe damage including blindness.
Skin	Avoid contact with skin. Causes burns. Skin Corrosion/Irritation.

**Toxicology data for the components**

Toxicologically Synergistic Products	No information available
(b) skin corrosion/irritation;	Category 1 B
(c) serious eye damage/irritation;	Category 1
(d) respiratory or skin sensitization;	
Respiratory	No data available
Skin	No data available
(e) germ cell mutagenicity;	No data available
(f) carcinogenicity;	

The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Silver fluoride (AgF)	7775-41-9	Not listed	Not listed	Not listed	Not listed	Not listed

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; Not applicable  
Solid

**Symptoms / effects, both acute and delayed** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

**Other Adverse Effects** The toxicological properties have not been fully investigated.

**Endocrine Disrupting Properties** This product does not contain any known or suspected endocrine disruptors.

## 12. Ecological information

### Ecotoxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

**Persistence and Degradability** Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

### DOT

UN-No UN3260  
 Proper Shipping Name Corrosive solid, acidic, inorganic, n.o.s.  
 Technical Shipping Name Silver fluoride (AgF)  
 Hazard Class 8  
 Packing Group II

### TDG

UN-No UN3260  
 Proper Shipping Name Corrosive solid, acidic, inorganic, n.o.s.  
 Technical Shipping Name Silver fluoride (AgF)  
 Hazard Class 8  
 Packing Group II

**IATA**

<b>UN-No</b>	UN3260
<b>Proper Shipping Name</b>	Corrosive solid, acidic, inorganic, n.o.s.
<b>Technical Shipping Name</b>	Silver fluoride (AgF)
<b>Hazard Class</b>	8
<b>Packing Group</b>	II

**IMDG/IMO**

<b>UN-No</b>	UN3260
<b>Proper Shipping Name</b>	Corrosive solid, acidic, inorganic, n.o.s.
<b>Technical Shipping Name</b>	Silver fluoride (AgF)
<b>Hazard Class</b>	8
<b>Packing Group</b>	II

## 15. Regulatory Information

**United States of America Inventory**

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Silver fluoride (AgF)	7775-41-9	X	ACTIVE	-

**Legend:**

**TSCA** US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

- - Not Listed

**TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)**

Not applicable

**TSCA 12(b) - Notices of Export**

Not applicable

**International Inventories**

Canada (DSL/NDL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Silver fluoride (AgF)	7775-41-9	-	X	231-895-8	-	X	X	X	-	KE-31274

**KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Component	CAS No	Weight %	SARA 313 - Threshold Values %	SARA 313 - Reporting thresholds
Silver fluoride (AgF)	7775-41-9	> 99	1.0 %	-

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)**

Component	CWA - Hazardous Substances	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants
Silver fluoride (AgF)	-	-	X	-

**Clean Air Act**

Not applicable

**OSHA** - Occupational Safety and Health Administration Not applicable

**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.

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

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

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Silver fluoride (AgF)	X	X	X	-	X

**U.S. Department of Transportation**

Reportable Quantity (RQ): N  
DOT Marine Pollutant N  
DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security** This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Authorisation/Restrictions according to EU REACH** Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Silver fluoride (AgF)	7775-41-9	-	-	-

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Silver fluoride (AgF)	7775-41-9	Not applicable	Not applicable	Not applicable	Not applicable

**Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?**

Not applicable

**Other International Regulations**

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)



Silver fluoride (AgF)	7775-41-9	Not applicable	Not applicable	Not applicable	Not applicable
-----------------------	-----------	----------------	----------------	----------------	----------------

16. Other Information

Prepared By	Product stewardship (Regulatory Affairs) Thermo Fisher Scientific email - begel.sdsdesk@thermofisher.com
Revision Date	19-Dec-2025
Print Date	19-Dec-2025
Revision Summary	Updated to the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) which published its Final Rule in the Federal Register revising the Hazard Communication Standard (HCS/HazCom), 29 CFR 1910.1200 (2024) (HCS §1910.1200, 2024), May 20, 2024, effective July 19, 2024.

Disclaimer

The information provided in this 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 SDS