



# SAFETY DATA SHEET

Preparation Date: 1/16/2019 Revision date 1/16/2019 **Revision Number: G1** 

## 1. Identification

Product identifier

Product code: S1542

**Product Name:** STANNOUS FLUORIDE

Other means of identification

Tin difluoride Synonyms:

Tin Fluoride

Tin bifluoride

7783-47-3 CAS #: RTECS# XQ3450000 Not available CI#:

Recommended use of the chemical and restrictions on use

Recommended use: No information available. No information available Uses advised against

Spectrum Chemical Mfg. Corp Supplier:

14422 South San Pedro St.

Gardena, CA 90248 (310) 516-8000

Order Online At: https://www.spectrumchemical.com

Emergency telephone number Chemtrec 1-800-424-9300

Tom Tyner (USA - West Coast) **Contact Person:** Ibad Tirmiz (USA - East Coast) **Contact Person:** 

# 2. HAZARDS IDENTIFICATION

#### Classification

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

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1

#### Label elements

Danger

Hazard statements

Harmful if swallowed Causes skin irritation

Causes serious eye damage

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#### Hazards not otherwise classified (HNOC)

Not Applicable

# Other hazards

Not available

#### **Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Wear protective gloves Wear eye/face protection

#### **Precautionary Statements - Response**

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: Wash with plenty of water

If skin irritation occurs: Get medical advice/attention Take off contaminated clothing and wash it before reuse

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

#### **Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight-%
Stannous Fluoride	7783-47-3	100

# 4. FIRST AID MEASURES

First aid measures

General Advice: National Capital Poison Center in the United States can provide assistance if you

have a poison emergency and need to talk to a poison specialist. Call

1-800-222-1222.

**Skin Contact:** Wash off immediately with soap and plenty of water removing all contaminated clothing and

shoes. Get medical attention. If skin irritation persists, call a physician.

Eye Contact: Flush eyes with water for 15 minutes. Immediate medical attention is required. Call a

physician immediately.

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**Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give

oxygen. Get medical attention.

**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an

unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

**Symptoms** Causes serious eye damage

Risk of serious damage to eyes

Causes skin irritation

Ingestion of very large amounts can cause Fluoride poisoning with weakness, convulsions,

collapse and death

May cause abdominal pain, nausea, vomiting, diarrhea

Thirst
Dehydration
May cause salivation

Ingestion of very large amounts may cause Fluorosis

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

**Protection of first-aiders** 

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

# 5. FIRE-FIGHTING MEASURES

**Extinguishing Media** 

Suitable Extinguishing Media: The product is not flammable. If it is involved in a fire,

extinguish the fire using an agent suitable for the type of

surrounding fire.

Unsuitable Extinguishing Media: No information available.

Specific hazards arising from the chemical

**Hazardous combustion products**No information available.

Specific hazards No information available.

Special Protective Actions for Firefighters

Specific Methods: No information available

**Special Protective Equipment for Firefighters:** As in any fire, wear self-contained breathing apparatus

pressure-demand, MSHA/NIOSH (approved or equivalent)

and full protective gear

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#### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Use personal

protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not touch damaged containers or spilled material unless wearing appropriate protective

clothing. Remove all sources of ignition.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Prevent entry into waterways, sewers, basements or confined areas.

#### Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent

spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated

surface thoroughly.

#### 7. HANDLING AND STORAGE

#### Precautions for safe handling

#### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Remove all sources of ignition. Keep away from incompatible materials.

# Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

## Conditions for safe storage, including any incompatibilities

#### **Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

# **Incompatible Materials:**

Acids

Oxidizing agents

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# Control parameters

# National occupational exposure limits

# **United States**

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Stannous Fluoride	7783-47-3	None	None	None	None

# Canada

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Stannous Fluoride	7783-47-3	None	None	None	None

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FLUORIDE

#### **Australia and Mexico**

Component	CAS No	Australia	Mexico
Stannous Fluoride	7783-47-3	None	None

## **Appropriate engineering controls**

**Engineering measures to reduce exposure:** Ensure adequate ventilation. Use process enclosures,

local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants

below the exposure limit.

# Individual protection measures, such as personal protective equipment

#### **Personal Protective Equipment**

Eye protection: Goggles

**Skin and body protection:** Chemical resistant apron

Long sleeved clothing

Gloves

**Respiratory protection:** Effective dust mask. or. Wear respirator with dust filter. Use a dust respirator

under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to

use an approved/certified respirator or equivalent.

**Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or

smoke. Wash hands before breaks and immediately after handling the product

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:Appearance:Color:SolidCrystalline powder.White.

Odor:TasteFormulaNo information available.No information available.SnF2

Molecular/Formula weight (g/mole): Flammability (solid, gas)

156.71

Flashpoint (°C/°F):

No information available

Flash Point Tested according to: Autoignition Temperature (°C/°F): Lower Explosion Limit (%): Not available

No information available

No information available

Upper Explosion Limit (%): Melting point/range(°C/°F): Decomposition temperature(°C/°F):

No information available 219 °C/426 °F No information available

**Boiling point/range(°C/°F):**850 °C/1562 °F

Bulk density:
No information available

Density (g/cm3):
4.57 @ 20 deg. C.

30 6/1362 1 No Illiottilation available 4.37 @ 20 deg. C.

Specific gravity: pH Vapor pressure @ 20°C (kPa):

**Evaporation rate:** 

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No information available Vapor density: VC

No information available

**VOC content (g/L):**No information available

Odor threshold (ppm): Partition coefficient

No information available (n-octanol/water):

No information available

Viscosity:

No information available

Miscibility: Solubility:

No information available 
No information available

# 10. STABILITY AND REACTIVITY

Reactivity

Reacts with acids to form hydrogen fluoride

**Chemical stability** 

**Stability:** Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

**Conditions to avoid:** Heat. Avoid dust formation. Incompatible materials.

Incompatible Materials: Acids

Oxidizing agents

**Hazardous decomposition** 

products:

No information available.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

# 11. TOXICOLOGICAL INFORMATION

# Information on likely routes of exposure

# Principal Routes of Exposure:

Ingestion. Inhalation. Skin. Eyes.

# **Acute Toxicity**

#### **Component Information**

Stannous Fluoride

CAS No 7783-47-3

**LD50/oral/rat** = 360 mg/kg Oral LD50 Rat

LD50/oral/mouse = 184 mg/kg

**LD50/dermal/rabbit** = No information available

**LD50/dermal/rat** = No information available

**LC50/inhalation/rat** = No information available

LC50/inhalation/mouse = No information available

Other LD50 or LC50information = No information available

#### **Product Information**

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LD50/oral/rat =

Value - Acute Tox = 360 mg/kg

LD50/oral/mouse =

Value - Acute Tox Oral = 184 mg/kg

LD50/dermal/rabbit

Value - Acute Tox = No information available

LD50/dermal/rat

**VALUE - Acute Tox Dermal =** No information available

LC50/inhalation/rat

VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

**Symptoms** 

**Skin Contact**: Causes skin irritation.

**Eye Contact:** Causes serious eye damage. Risk of serious damage to eyes.

**Inhalation** May cause irritation of respiratory tract.

Ingestion Harmful if swallowed. Acute ingestion of fluorides may cause (nervous system

effects) neurological symptoms such as headache, tremors, convulsions, seizures/convulsions, tetanic contractions, muscle spasms, muscle weakness. May cause dehydration. May cause thirst. May cause abdominal pain, nausea,

vomiting, diarrhea. May cause salivation.

**Aspiration hazard** No information available.

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

Chronic Toxicity Chronic or prolonged exposure from inhalation or ingestion of fluoride dusts,

vapors or mists may cause Fluorosis (chronic fluoride poisoning) Fluorisis is characterized by weight loss, weakness, anemia, brittle bones, and stiff joints. Other musculoskeletal effects may include teeth discoloration/mottled enamel, tendon calcification, increase in bone density and hardening of the bone

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(osterosclerosis) and calcification of bone.

**Sensitization:** No information available.

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic.

Component	CAS No	IARC	ACGIH -	NTP	OSHA HCS -	Australia -	Australia -
			Carcinogens		Carcinogens	Notifiable	Prohibited

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FLUORIDE

					Carcinogenic Substances	Carcinogenic Substances
Stannous Fluoride	Supplement 7 [1987] Fluorides inorganic used in drinking-water	Not listed	Not listed	Not listed	Not listed	Not listed

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity No data is available

Reproductive Effects: No information available Developmental Effects: No information available Teratogenic Effects: No information available

**Specific Target Organ Toxicity** 

STOT - single exposure STOT - repeated exposure Target Organs: No information available. No information available. No information available.

## 12. ECOLOGICAL INFORMATION

# **Ecotoxicity**

**Ecotoxicity effects:** No data available.

Persistence and degradability: No information available

**Bioaccumulative potential:** No information available.

Mobility in soilNo information availableOther adverse effectsNo information available.

## 13. DISPOSAL CONSIDERATIONS

# **Disposal Methods**

#### Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

## Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Stannous Fluoride	7783-47-3	None	None	None	None

# **14. TRANSPORT INFORMATION**

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DOT

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class
Subsidiary Class
Packing group:
No information available

Number

Marine PollutantNo data availableDOT RQ (lbs):No information availableSpecial ProvisionsNo Information availableSymbol(s):No information availableDescription:No information available

TDG (Canada)

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class
Subsidiary Risk:
Packing Group:
Marine Pollutant
Description:
No information available
No information available
No Information available
No information available

**ADR** 

UN Number Not regulated

Proper Shipping Name:
Transport hazard class(es)
Packing group
Subsidiary Risk:

No information available
No information available
No information available

**IMDG** 

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
Marine Pollutant

No information available
No information available
No information available
No information available

**RID** 

UN Number Not Regulated

Proper Shipping Name:
Transport hazard class(es)
Subsidiary Risk:
Packing group

No information available
No information available
No information available
No information available

ICAO (air)

UN-No: Not Regulated

Proper Shipping Name:
Hazard Class
Subsidiary Risk:
No information available
No information available
No information available
No information available

**IATA** 

UN Number Not Regulated

Proper Shipping Name: No information available Transport hazard class(es) No information available Subsidiary Risk: No information available

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Packing group Precautionary Statements -

Response

No information available IF exposed or concerned

Special Provisions

No information available

## 15. REGULATORY INFORMATION

#### International Inventories

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia AICS	EINECS-No.
Stannous Fluoride	7783-47-3	PresentACTIV E	Present KE-33846	Present	Present (1)-346	Present	Present	Present 231-999-3

## **U.S. Regulations**

# California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

# Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

#### Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male	Female
				Reproductive	Reproductive
				Toxicity	Toxicity:
Stannous Fluoride	7783-47-3	Not Listed	Not Listed	Not Listed	Not Listed

#### **CERCLA/SARA**

	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Stannous Fluoride	7783-47-3	None	None	None	None	None

#### U.S. TSCA

Component		` ` `	TSCA 8(d) -Health and Safety Reporting
Stannous Fluoride	7783-47-3	Not Applicable	Not Applicable

#### Canada

#### WHIMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

The WHMIS 2015 classification of this product has not been validated or reviewed yet.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

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## DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Stannous Fluoride	7783-47-3	Present	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances	
Stannous Fluoride	7783-47-3	Not listed	
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject	
		to Mandatory Reporting	
Stannous Fluoride	7783-47-3	Not listed	

#### **EU Classification**

#### EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Stannous Fluoride	7783-47-3	

#### EU - CLP (1272/2008)

## R-phrase(s)

R22 - Harmful if swallowed

R38 - Irritating to skin

R41 - Risk of serious damage to eyes

# S -phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S27 - Take off immediately all contaminated clothing

S36 - Wear suitable protective clothing

S37 - Wear suitable gloves

S39 - Wear eye/face protection

Component	CAS No	 Concentration Limits:	Safety Phrases
Stannous Fluoride	7783-47-3	No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

# Indication of danger:

Xn - Harmful Xi - Irritant





# **16. OTHER INFORMATION**

Preparation Date: 1/16/2019
Revision date 1/16/2019
Prepared by: Sonia Owen

**Disclaimer:** All chemicals may pose unknown hazards and should be used with caution. This

Safety Data Sheet (SDS) applies only to the material as packaged. If this product

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is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. 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 SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet** 

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