

Precautionary Statements Wear protective gloves / protective clothing / eye protection / face protection. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. **IF SWALLOWED:** Immediately call a POISON CENTER or doctor/physician. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. **IF ON SKIN:** Wash with plenty of soap and water.

Supplemental Hazard Information (EU) Contact with acids liberates very toxic gas.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Sodium Fluoride	7681-49-4	231-667-8	01-2119539420-47-XXXX	<99%	Acute Tox. 3 (O),Skin Irrit. 2,Eye Irrit. 2

Section 4. First Aid

4.1 Description of first aid measures

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION.

Skin Thoroughly wash off skin with soap and water. Remove contaminated clothing immediately and wash before re-use.

Inhalation Remove from exposure. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. OBTAIN MEDICAL ATTENTION.

Ingestion If conscious wash out mouth with water. Do not induce vomiting. OBTAIN MEDICAL ATTENTION URGENTLY.

Personal protection for first aiders Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media Water spray.

Unsuitable Media Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards May evolve toxic fumes if involved in a fire.

5.3 Advice for firefighters

Advice for firefighters Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection Evacuate area immediately. Only re-enter area with full protective clothing and breathing apparatus.

6.2 Environmental precautions

Environmental Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage	Sweep up and transfer to a suitable container for disposal. Wash area down with copious amounts of water.
Minor Spillage	Sweep up and transfer to a suitable container for disposal. Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains dust concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Keep well protected from ingress of water and well separated from acids

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)	Short Term 15min period		
Sodium Fluoride	7681-49-4	<99%	-	2.5 mg/m-3	-	7.5 mg/m-3

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection	Use L.E.V. or natural ventilation to maintain dust concentrations below exposure limits.
Hand Protection	Use PVC gauntlets.
Eye Protection	Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	White crystalline, deliquescent powder.
Odour	Odourless.
pH	10 @ 20°C 4%
Boiling Point	1705°C
Melting Point	993°C
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	1mmHg @ 77°C
Relative Density	2.7800
Water Solubility	4%

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Avoid ingress of water and contact with acids.
10.5	Incompatible Materials	Platinum and bromine trifluoride.
10.6	Hazardous Decomposition Products	May give off toxic and acidic fumes in contact with acids or if heated to decomposition.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	The solid and solutions will be irritating to the eyes.
Skin	The solid and solutions will be irritating to the skin.
LD50 Skin	>2000mg/kg Rat
Ingestion	Toxic if swallowed. Ingestion may cause severe internal irritation and damage, nausea, vomiting, abdominal pains and diarrhoea.
LD50 Oral	52mg/kg Rat
Inhalation	Inhalation of the dust can result in symptoms similar to those due to ingestion.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	No information is available but unlikely to be a carcinogen.
Mutagenicity	No information is available.
Reproductive Effects	None identified.

Section 12. Ecological

12.1	Toxicity	Will persist in the form of insoluble fluorides. Harmful to aquatic life.
	LC50 Algal	850mg/l Algae (72 hours)
	LC50 Crustacea	96mg/l Daphnia magna (48 hours)
	LC50 Fish	200mg/l Rainbow Trout (96 hours)
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Transfer to a large container and carefully add soda ash and calcium hydroxide at intervals. Decant liquid after 24 hours and neutralise hydrochloric acid, wash to drain with lots of water. The remaining sludge should be removed by a licensed contractor.
Contaminated Packaging	Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number	1690
14.2 Proper Shipping Name	Sodium fluoride, solid
14.3 Transport classes	
UN classification	6.1
Subsidiary hazard(s)	None
Transport category	2
ADR Hazard ID	60
Tunnel Restriction Code	E
14.4 Packing Group	III
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Acute toxicity, category 3 (oral); Skin corrosion/irritation, category 2; Serious eye damage/irritation, category 2

Signal word Danger

Hazard Pictograms



Hazard Statements H301, H319, H315
Toxic if swallowed. Causes serious eye irritation. Causes skin irritation.

Precautionary Statements P280, P270, P264, P301+P310, P305+P351+P338, P302+P352
Wear protective gloves / protective clothing / eye protection / face protection. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF ON SKIN: Wash with plenty of soap and water.

Supplemental Hazard Information (EU) EUH032
Contact with acids liberates very toxic gas.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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