



Sodium fluoride

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Date of issue: 04/02/2019

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Substance name : Sodium fluoride
EC-No. : 231-667-8
CAS-No. : 7681-49-4
REACH registration No : 01-2119539420-47-0011
Formula : NaF

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Professional use, Industrial use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

F2 Chemicals Ltd
Lea Lane
Lea Town
PR4 0RZ Preston - UK
T +44 (0) 1772 775800
safety@f2chemicals.com

1.4. Emergency telephone number

Emergency number : +44 (0) 1772 775833 (24 hr)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 3 (Oral) H301
Skin Irrit. 2 H315
Eye Irrit. 2 H319

Full text of hazard classes and H-statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS06

Signal word (CLP) : Danger

Hazard statements (CLP) : H301 - Toxic if swallowed.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.

Precautionary statements (CLP) : P264 - Wash hands thoroughly after handling.
P280 - Wear protective clothing, eye protection, face protection.
P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER, a doctor.
P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

No additional information available

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SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium fluoride	(CAS-No.) 7681-49-4 (EC-No.) 231-667-8 (REACH-no) 01-2119539420-47-0011	100	Acute Tox. 3 (Oral), H301 Skin Irrit. 2, H315 Eye Irrit. 2, H319

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
- First-aid measures after skin contact : Specific treatment (see Apply calcium gluconate gel or dressings soaked in 20% calcium gluconate solution on this label). Wash skin with plenty of water. Take off immediately all contaminated clothing.
- First-aid measures after eye contact : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing.
- First-aid measures after ingestion : If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting. Specific treatment (see Give water with calcium gluconate or calcium lactate to drink on this label).

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

- Symptoms/effects after skin contact : Causes skin irritation.
- Symptoms/effects after eye contact : Risk of serious damage to eyes.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical, CO₂, or water spray or regular foam.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not flammable.
- Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Use self-contained breathing apparatus and chemically protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment.
- Emergency procedures : Do not breathe dust. Avoid contact with skin and eyes.

6.1.2. For emergency responders

- Protective equipment : Use self-contained breathing apparatus and chemically protective clothing.
- Emergency procedures : Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous.

6.2. Environmental precautions

Do not allow to enter drains or water courses.

6.3. Methods and material for containment and cleaning up

- For containment : Using a clean shovel, put the material in a dry container and cover without compressing it.
- Methods for cleaning up : Shovel or sweep up and put in a closed container for disposal.
- Other information : Dispose of materials or solid residues at an authorized site.

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6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin, eyes and clothing. Avoid dust formation.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Does not require any specific or particular technical measures.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Sodium fluoride (7681-49-4)		
EU	IOELV TWA (mg/m ³)	<= 2.5 mg/m ³

8.2. Exposure controls

Personal protective equipment:

Gloves.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: White solid.
Molecular mass	: ≈ 42 g/mol
Colour	: white.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: ≈ 996 °C
Boiling point	: ≈ 1695
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: ≈ 2.8
Relative density	: No data available
Solubility	: Water: ≈ 42 g/l
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Contact with acids liberates very toxic gas.

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Acids.

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Toxic if swallowed.

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Sodium fluoride (7681-49-4)	
LD50 oral rat	≈ 148.5 mg/kg
LD50 dermal rat	> 2000 mg/kg
Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

Sodium fluoride (7681-49-4)	
LC50 fish 1	≈ 108 mg/l rainbow trout
EC50 Daphnia 1	≈ 338 mg/l

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment.

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

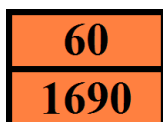
In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
1690	1690	1690	1690	1690
14.2. UN proper shipping name				
SODIUM FLUORIDE, SOLID	SODIUM FLUORIDE, SOLID	Sodium fluoride, solid	SODIUM FLUORIDE, SOLID	SODIUM FLUORIDE, SOLID
Transport document description				
UN 1690 SODIUM FLUORIDE, SOLID, 6.1, III, (E)	UN 1690 SODIUM FLUORIDE, SOLID, 6.1, III	UN 1690 Sodium fluoride, solid, 6.1, III	UN 1690 SODIUM FLUORIDE, SOLID, 6.1, III	UN 1690 SODIUM FLUORIDE, SOLID, 6.1, III
14.3. Transport hazard class(es)				
6.1	6.1	6.1	6.1	6.1
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : T5
 Limited quantities (ADR) : 5kg
 Excepted quantities (ADR) : E1
 Packing instructions (ADR) : P002, IBC08, LP02, R001
 Special packing provisions (ADR) : B3
 Mixed packing provisions (ADR) : MP10
 Portable tank and bulk container instructions (ADR) : T1
 Portable tank and bulk container special provisions (ADR) : TP33
 Tank code (ADR) : SGAH
 Tank special provisions (ADR) : TU15, TE19
 Vehicle for tank carriage : AT
 Transport category (ADR) : 2
 Special provisions for carriage - Bulk (ADR) : VC1, VC2, AP7
 Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28
 Special provisions for carriage - Operation (ADR) : S9
 Hazard identification number (Kemler No.) : 60
 Orange plates :



Tunnel restriction code (ADR) : E
 EAC code : 2Z

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- Transport by sea

Packing instructions (IMDG)	: P002, LP02
IBC packing instructions (IMDG)	: IBC08
IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: T1
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-A
Stowage category (IMDG)	: A
Segregation (IMDG)	: SG35
Properties and observations (IMDG)	: White crystals or powder. React with acids, evolving hydrogen fluoride, a toxic, irritating and corrosive gas, apparent as white fumes. Toxic if swallowed, by skin contact or by inhalation.

- Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y645
PCA limited quantity max net quantity (IATA)	: 10kg
PCA packing instructions (IATA)	: 670
PCA max net quantity (IATA)	: 100kg
CAO packing instructions (IATA)	: 677
CAO max net quantity (IATA)	: 200kg
ERG code (IATA)	: 6L

- Inland waterway transport

Classification code (ADN)	: T5
Special provisions (ADN)	: 802
Limited quantities (ADN)	: 5 kg
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: B
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0

- Rail transport

Classification code (RID)	: T5
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P002, IBC08, LP02, R001
Special packing provisions (RID)	: B3
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T1
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: SGAH
Special provisions for RID tanks (RID)	: TU15
Transport category (RID)	: 2
Special provisions for carriage – Bulk (RID)	: VC1, VC2, AP7
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW28, CW31
Colis express (express parcels) (RID)	: CE11
Hazard identification number (RID)	: 60

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

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15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of H- and EUH-statements:

Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H301	Toxic if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

F2 template (no freezing point)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product