

# Sodium fluoride

## Safety Data Sheet

**256447**

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

Version: 2.0

Date of issue: 29/08/2013 Revision date: 23/02/2017

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

#### 1.1. Product identifier

Product form : Substance  
 Substance name : Sodium fluoride  
 EC Index No : 009-004-00-7  
 EC No : 231-667-8  
 CAS No : 7681-49-4  
 Product code : 256447  
 Formula : FNa  
 Product group : Raw material

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

##### 1.2.1. Relevant identified uses

Main use category : Pharmaceutical  
 Industrial/Professional use spec : Industrial  
 For professional use only

##### 1.2.2. Uses advised against

No additional information available

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

##### Supplier

Duchefa Farma BV  
 A. Hofmanweg 71  
 2031BH Haarlem - Nederland  
 T +31(0)23-5319093  
[farma@duchefa.nl](mailto:farma@duchefa.nl) - [www.duchefa-farma.com](http://www.duchefa-farma.com)

#### 1.4. Emergency telephone number

Emergency number : Supplier contact information:  
 +31(0)23-5319093 (M-F 09:00-17:00)  
 +31(0)6-30109355 (outside office hours)

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Centre Hospitalier Universitaire de Constantine	Avonley Road SE14 5ER London	0870 243 2241	

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

Acute toxicity (oral), Category 3 H301  
 Skin corrosion/irritation, Category 2 H315

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Serious eye damage/eye irritation, Category 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

GHS07

Signal word (CLP) : Danger

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

Precautionary statements (CLP) : P262 - Do not get in eyes, on skin, or on clothing  
P264 - Wash hands, forearms and face thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P301 - IF SWALLOWED:  
P310 - Immediately call a POISON CENTER or doctor/physician

EUH-statements : EUH032 - Contact with acids liberates very toxic gas

## 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type : Pharmaceuticals

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Sodium fluoride	(CAS No) 7681-49-4 (EC No) 231-667-8 (EC Index No) 009-004-00-7	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 general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

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- First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest. Seek medical advice (show the label where possible).
- First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
- First-aid measures after ingestion : Rinse mouth. Induce vomiting (ONLY IN CONSCIOUS PERSONS!). Obtain emergency medical attention. Drink plenty of water.

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

- Symptoms/injuries : Symptoms : pain. Vomiting. Shock. Irregular heartbeat. Respiratory collapse. Death.
- Symptoms/injuries after skin contact : Causes skin irritation.
- Symptoms/injuries after ingestion : Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard. Severe irritation or burns to the mouth, throat, oesophagus, and stomach.
- Chronic symptoms : Unconsciousness. Convulsions. Irregular heartbeat. Respiratory collapse. Shock. Danger of serious damage to health by prolonged exposure. Harmful. bone marrow.

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

No additional information available

## SECTION 5: Fire-fighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Making extinguishing agents environment-friendly.
- Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

- Reactivity in case of fire : On burning: release of (highly) toxic gases/vapours. fluorinated compounds. Hydrogen fluoride.

### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

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

- General measures : Avoid raising dust. Avoid contact with substance.

#### 6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

#### 6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

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

- Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.
- Other information : With a mixture of lime and soda sodium fluoride can be rendered harmless: precipitation of calcium fluoride.

### 6.4. Reference to other sections

Reference to other sections (8, 13).

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. Avoid raising dust.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work thoroughly after handling.

### 7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep container closed when not in use. Keep only in the original container in a cool, well-ventilated place.
- Incompatible products : Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight.
- Storage temperature : 15 - 25 °C
- Storage area : TRGS 514 "Storage of toxic and very toxic substances ..." note.

### 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 <sup>3</sup> )	2.5 mg/m <sup>3</sup>

### 8.2. Exposure controls

#### Personal protective equipment:

Avoid all unnecessary exposure.

#### Hand protection:

Type	Material	Permeation	Thickness (mm)	Standard
Gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,11	EN 374

#### Eye protection:

Safety glasses (to European standard EN 166 or equivalent)

#### Skin and body protection:

Protective clothing (with elasticated cuffs and closed neck)

#### Respiratory protection:

Wear respiratory protection. Dustmask with filtertype P3

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### Other information:

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: White.
Odour	: odourless.
Odour threshold	: No data available
pH	: 8 - 10
pH solution	: 40 g/l 20 ° C
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 990 °C
Freezing point	: No data available
Boiling point	: 1704 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 2.79 g/cm <sup>3</sup> 20 ° C
Solubility	: Water: 42 g/l 20 ° C
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

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Not established.

### 10.3. Possibility of hazardous reactions

Not established.

### 10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Moisture.

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**10.5. Incompatible materials**

Strong acids.

**10.6. Hazardous decomposition products**

Hydrogen fluoride.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects**

Acute toxicity : Oral: Toxic if swallowed.

<b>Sodium fluoride (7681-49-4)</b>	
LD50 oral rat	80 ml/kg
LD50 oral	200 mg/kg Rabbit

Skin corrosion/irritation	: Causes skin irritation. pH: 8 - 10
Additional information	: Causes skin irritation
Serious eye damage/irritation	: Causes serious eye irritation. pH: 8 - 10
Additional information	: Causes serious eye damage risk of corneal clouding
Respiratory or skin sensitisation	: Not classified
Additional information	: Inhalation may cause irritation (cough, short breathing, difficulty in breathing)
Germ cell mutagenicity	: Not classified Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Toxic if swallowed.
IARC group	: 3

**SECTION 12: Ecological information****12.1. Toxicity**

<b>Sodium fluoride (7681-49-4)</b>	
LC50 fish 1	660 mg/l <i>L. idus</i>
EC50 Daphnia 1	340 mg/l
ErC50 (algae)	249 mg/l <i>Sc. quadricauda</i>

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### 12.2. Persistence and degradability

Sodium fluoride (7681-49-4)	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

Sodium fluoride (7681-49-4)	
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

Sodium fluoride (7681-49-4)	
Ecology - soil	Endangering to drinking water.

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

Additional information : Avoid release to the environment

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

- Regional legislation (waste) : Disposal must be done according to official regulations.  
Waste treatment methods : WASTES FROM INORGANIC CHEMICAL PROCESSES.  
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
Dispose of contents/container to Dispose of this material and its container at hazardous or special waste collection point.  
Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

## SECTION 14: Transport information

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

ADR	IATA
<b>14.1. UN number</b>	
1690	1690
<b>14.2. UN proper shipping name</b>	
SODIUM FLUORIDE, SOLID	Not applicable
<b>14.3. Transport hazard class(es)</b>	
6.1	6.1
	Not applicable
<b>14.4. Packing group</b>	
III	Not applicable
<b>14.5. Environmental hazards</b>	
Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available	

### 14.6. Special precautions for user

#### - Overland transport

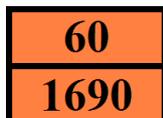
- Classification code (ADR) : T5  
Limited quantities (ADR) : 5kg  
Excepted quantities (ADR) : E1  
Vehicle for tank carriage : AT  
Transport category (ADR) : 2

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Hazard identification number (Kemler No.) : 60

Orange plates :



Tunnel restriction code (ADR) : E

EAC code : 2Z

#### - Air transport

No data available

#### 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

Sodium fluoride is not on the REACH Candidate List

Sodium fluoride is not on the REACH Annex XIV List

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Indication of changes:

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.

1.4	Emergency telephone	Modified	Added additional information
2	Classification (DSD/DPD)	Removed	Obsolete
8.2	Hand protection	Modified	Specified material, thickness, et cetera of gloves
8.2	Respiratory protection	Modified	Added additional information (type of clothing related to concentration levels)

Abbreviations and acronyms:

SDS	Safety Data Sheet
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road

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ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : REACH Disclaimer:  
This information is based on current knowledge. Consistency of data in the SDS with CSR is considered, as far as the information is available at the time of compilation (cfr Revision date and Version number). **DISCLAIMER OF LIABILITY** The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness.

### 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
EUH032	Contact with acids liberates very toxic gas

### SDS EU (REACH Annex II) Version 2017

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