



Trade name: Natrii fluoridum

Date revised: 29.07.10

Substance number: 066160

Version: 1 / CH

Date of printing: 29.07.10

01. Identification of the substance/preparation and of the company/undertaking

Trade name

Natrii fluoridum

Item-No. 06616000

Use of the substance/preparation

Manufacture of pharmaceutical products, Reagent for analyses

Company/undertaking identification

Address

Hänseler AG

Industriestrasse 35

9101 Herisau

Telephone no. 0041 (0)71 353 58 58

Emergency Switzerland :145 / Abroad +41 (0)44 251 51 51

telephone

E-mail address sdb@haenseler.ch

02. Hazards identification

Classification

Classification T, R25
R32
Xi, R36/38

Hazard symbols

T Toxic

R phrases

25 Toxic if swallowed.
32 Contact with acids liberates very toxic gas.
36/38 Irritating to eyes and skin.

Classification

Classification (Regulation (EC) No. 1272/2008)
Acute Tox. 3 H301 Toxic if swallowed.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.

03. Composition / information on ingredients

Molecular weight

Value 41.98 g/mol

Hazardous ingredients

Sodium fluoride

CAS no. 7681-49-4

EINECS no. 231-667-8

Concentration >= 50 %

Classification Xi, R36/38

T, R25

R32

04. First aid measures

After inhalation

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Ensure supply of fresh air. Summon a doctor immediately.

After skin contact

Remove contaminated, soaked clothing immediately and dispose of safely. Wash skin thoroughly with water (15 min.). Summon a doctor immediately.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Summon a doctor immediately.

After ingestion

Rinse mouth thoroughly with water. If patient is conscious, give liquids containing calcium or magnesium (e.g. milk, dissolved preparations containing calcium or magnesium). Keep warm and at rest. Summon a doctor immediately. Careful when inducing vomiting.

05. Fire-fighting measures**Suitable extinguishing media**

Extinguishing measures to suit surroundings

Special exposure hazards arising from the substance or preparation itself, its combustion products or from resulting gases

The product is not combustible. If a fire breaks out nearby evolution of dangerous gases possible. In the event of fire the following can be released: Hydrogen fluoride (HF)

Special protective equipment for fire-fighting

Use self-contained breathing apparatus. Use personal protective clothing.

Other information

Suppress vapours with water spray jet. Do not discharge into surface waters/groundwater.

06. Accidental release measures**Personal precautions**

Do not inhale vapours. Do not inhale dust. Ensure supply of fresh air. Use breathing apparatus if exposed to vapours/dust/aerosol.

Environmental precautions

Do not allow to enter drains or waterways.

Methods for cleaning up

For tall amounts: Take up mechanically and collect in suitable container for disposal. Clean up affected area. Avoid raising dust.

07. Handling and storage**Storage****Requirements for storage rooms and vessels**

Keep container tightly closed in a well-ventilated place. Keep in a dry place. Do not use glass containers.

Recommended storage temperature

Value 5 - 30 °C

08. Expose controls/personal protection**Exposure limit values****Sodium fluoride**

Type	MAK	
Value	1.5	mg/m ³
Short term exposure limit	3	mg/m ³
Ceiling limit value	4x15	
Remarks	B	



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General protective and hygiene measures

Avoid any contact with the body. Preventative skin protection. Wash hands and face after work. Remove contaminated, soaked clothing immediately and dispose of safely. Provide adequate ventilation. Do not inhale dust.

Occupational exposure controls**Respiratory protection**

Use breathing apparatus in dust/fumes/mist-laden atmosphere. combination filter B-P3

Hand protection

nitrile rubber - NBR

Material thickness		0.11	mm
Penetrating time	>	480	min

Eye protection

Safety glasses

Skin protection

Protective clothing

09. Physical and chemical properties**General information**

Form	crystals
Colour	colourless
Odour	odourless

Important health, safety and environmental information**Flash point**

Remarks	not applicable
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Boiling point

Value	1704	°C
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Melting point

Value	993	°C
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Ignition temperature

Remarks	not applicable
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Fire promoting Properties

Remarks	not applicable
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Explosion limits

Remarks	not applicable
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Vapour pressure

Value	1	hPa
temperature	1077	°C

Density

Value	2.8	g/cm ³
temperature	20	°C

Viscosity

dynamic

Solubility in water

Value	42	g/l
temperature	20	°C

pH

Value	appr. 10.2
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Concentration/H ₂ O	40	g/l
temperature	20	°C

log Pow

Remarks no data available

Flammability :

no data available

10. Stability and reactivity**Conditions to avoid**

Protect from heat/overheating.

Materials to avoid

Formation of gas with: Acids, Contact with strong acids liberates hydrogen fluoride.

11. Toxicological information**Acute toxicity / further data****Acute oral toxicity**

Species	Human	
LDLo	71	mg/kg
Species	rat	
LD50	31	mg/kg
Remarks	Ingestion causes burns of the upper digestive and respiratory tracts.	

Acute dermal toxicity

Remarks Danger of resorption through the skin.

Irritant/corrosive effects**Irritant effect on skin**

Remarks Irritating to skin.

Irritant effect on eyes

Remarks Danger acute eye damage.

Effects after repeated or prolonged exposition (subacute, subchronic, cronic)**Mutagenicity**

valuation	No experimental information on genotoxicity in vitro available.
valuation	No mutagenicity in the Ames-test.

Experience in practice

Irritates the mucous membrane. Ingestion of aqueous solution causes gastrointestinal burns. May lead to nausea, headache, drowsiness and dizziness. disorders of the central nervous system

Other information

Observe the usual precautions for handling chemicals.

12. Ecological information**Fish toxicity**

Species	Gambusia affinis	
LC50	925	mg/l
Duration of exposure	96	h

Daphnia toxicity

Species	Daphnia magna	
EC50	338	mg/l
Duration of exposure	48	h

Algae toxicity



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Species	Desmodesmus subspicatus	
IC50	850	mg/l
Duration of exposure	72	h

Bacteria toxicity

Species	Pseudomonas putida	
EC0	231	mg/l
Duration of exposure	16	h
Species	activated sludge	
	2930	mg/l
Duration of exposure	3	h

General information / ecology

Hazard for drinking water supplies. Do not allow it to reach soil, ground water, water bodies or sewage system.

13. Disposal considerations**Disposal recommendations for the product**

Disposal in compliance with local and national regulations.

Disposal recommendations for packaging

Disposal in compliance with local and national regulations.

14. Transport information**Land transport ADR/RID**

UN number	1690
Class	6.1
Packing group	III
Label	6.1
Technical name	SODIUM FLUORIDE, SOLID

Marine transport IMDG/GGVSee

UN number	1690
Class	6.1
Packing group	III
Technical name	SODIUM FLUORIDE, SOLID

Air transport ICAO/IATA

UN number	1690
Class	6.1
Packing group	III
Technical name	SODIUM FLUORIDE, SOLID

15. Regulatory information**Labelling in accordance with EC directives**

The product is classified and labelled in accordance with EC directives/the relevant national laws.

Hazard symbols

T	Toxic
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Hazardous component(s) to be indicated on label

contains	Sodium fluoride
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R phrases

25	Toxic if swallowed.
32	Contact with acids liberates very toxic gas.
36/38	Irritating to eyes and skin.

S phrases

22	Do not breathe dust.
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36 Wear suitable protective clothing.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Labelling according to regulation (EC) No 1272/2008**Pictograms**

GHS06 Skull and crossbones

Signal Word

Dgr Danger

Hazard statements

H301 Toxic if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
EUH032 Contact with acids liberates very toxic gas.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.
P501.1 Dispose of contents/container to be taken to an authorised special waste incineration plant.

National regulations**Other regulations, restrictions and prohibition regulations**

Observe employment restrictions for young people.
Observe employment restrictions for child bearing mothers and nursing mothers.

16. Other information**R-phrases of the ingredients listed in chapter 3**

25 Toxic if swallowed.
32 Contact with acids liberates very toxic gas.
36/38 Irritating to eyes and skin.

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.