

## SAFETY DATA SHEET

### CHEMICAL SUBSTANCE / MIXTURE REGULATION (EC) No1907/2006 AS AMENDED BY REGULATION (EU) No 453/2010

#### SECTION 1: IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY

##### 1.1. Product identifiers

Product name	<b>Fluoride Solution</b>
Chemical name	Sodium fluoride (NaF)
Identified uses	Chemical analytic, biochemistry

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

Company	JSC "Medicinos linija"
Address	Karaliaučiaus str. 29 LT-78374 Šiauliai, Lithuania
Telephone	+370 41 553 553
Fax	+370 41 553 551
E-mail address	<a href="mailto:dental@i-dental.lt">dental@i-dental.lt</a>

##### 1.3. Emergency telephone number

Emergency telephone number (Available only during office hours)	+370 41 553 553
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#### SECTION 2: HAZARDS IDENTIFICATION

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

Acute Tox. 3, oral  
Skin Irr. 2  
Eye Irrit. 2

##### 2.1.1. Label elements

###### Pictogram



**Signal word**      **Danger**

###### Hazard statement

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

###### Precaution statement (prevention)

P264: Wash hands thoroughly after handling  
P270: Do not eat, drink or smoke when using this product  
P280: Wear protective gloves/protective clothing/eye protection/face protection

###### Precaution statement (response)

P301+P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
P321: Specific treatment (see section 4) on this label  
P330: Rinse mouth  
P302+P352: IF ON SKIN: Wash with plenty of soap and water  
P332+P313: If skin irritation occurs: Get medical advice/attention  
P362: Take off contaminated clothing and wash before reuse  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P337+P313: If eye irritation persists: Get medical advice/attention

###### Precautionary statement (disposal)

P501: Dispose of contents/container to licensed company

#### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

##### 3.1. Hazardous components of the mixture:

Name	CAS No	EC No	Index No	Hazard statement	Content, %
Sodium Fluoride	7681-49-4	231-667-8	009-004-00-7	H301, H315, H319	1

**SECTION 4: FIRST AID MEASURES****4.1. General advice**

In doubt, consult a physician. Show this safety data sheet to the doctor in attendance.

**4.2. If inhaled**

Remove the casualty from the hazardous area and take him to the fresh air. Half-upright position. If not breathing, give artificial respiration. Consult a physician.

**4.3. In case of skin contact**

Take off contaminated clothing. Wash off with soap and plenty of water. Consult a physician.

**4.4. In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Refer for medical attention.

**4.5. If swallowed**

Never give anything by mouth to an unconscious person. Take casualty to the hospital.

If the person is conscious rinse the mouth and spit the fluids out. Give one or two glasses of water to drink. **Do NOT induce vomiting.** Refer for medical attention if irritation symptoms persist.

**4.6. Most important symptoms and effects, both acute and delayed**

Inhalation: Cough. Sore throat.

Skin: Redness.

Eyes: Redness. Pain.

Ingestion: Abdominal pain. Burning sensation. Convulsions. Drowsiness. Cough. Diarrhoea. Sore throat. Vomiting. Unconsciousness.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**4.7. Indication of any immediate medical attention and special treatment needed**

No data available.

**SECTION 5: FIRE FIGHTING MEASURES****5.1. Extinguishing media**

Use extinguishing media appropriate to the surrounding fire conditions.

**5.2. Advice for fire fighters**

Wear self contained breathing apparatus for fire fighting. Not combustible. Contact with acids liberates toxic hydrogen fluoride gas. Wear self contained breathing apparatus for fire fighting if necessary.

**5.3. Special hazards arising from the substance or mixture**

Contact with acids liberates very toxic gas.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid vapour formation. Do not breathe vapours, mist or gas. NO open flames, NO contact with hot surfaces.

**6.2. Environmental precautions**

Do NOT let this chemical enter the environment. Sweep spilled substance into covered containers. Carefully collect remainder. Then store and dispose of according to local regulations.

**6.3. Methods and materials for containment and cleaning up**

Sweep spilled substance into covered containers. Carefully collect remainder. Then store and dispose of according to local regulations

**6.4. Reference to other sections**

For disposal see section 13.

**SECTION 7: HANDLING AND STORAGE****7.1. Precautions for safe handling**

Use personal protective equipment. Avoid vapour formation. Do not breathe vapours, mist or gas. Closed system, ventilation. Wash hands thoroughly after handling.

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

Cool. Separated from food and feedstuffs and incompatible materials. On contact with hot surfaces or flames this substance decomposes forming toxic and corrosive fumes. Reacts with acids to produce toxic and corrosive fumes.

**7.3. Specific end uses**

Chemical analytics, biochemistry.

**SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION****8.1. Exposure limit values**

TLV: (as fluoride) 2.5 mg/m<sup>3</sup> as TWA; A4 (not classifiable as a human carcinogen); BEI issued; (ACGIH 2003).

MAK: (as F) (Inhalable fraction) 1 mg/m<sup>3</sup>.

**8.2. Exposure controls**

Install ventilation to prevent vapour formatting.

Handling properly (p.7).

Contain no substances with occupational exposure limit values.

Preventive medical check-ups should be arranged.

**8.3. Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Do not smoke when handle.

**8.4. Personal protective equipment****8.4.1. Eyeface protection**

Wear eye / face protection equipment. Safety glasses with side-shields, conforming to EN 166.

**8.4.2. Hand protection**

Handle with chemical resistance (PVC, neoprene, rubber) gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**8.4.3. Skin protection**

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**8.4.4. Respiratory protection**

Does not dust. If you need to protect the airways use respirators, that have been tested and approved by the relevant governmental standards, such as CEN (EU) or NIOSH (USA).

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1. General information**

Appearance	Clear liquid
Colour	Colourless
Odour	Odourless

**9.2. Important health, safety and environment information**

Flash point	No data available
Specific gravity	No data available
Refractive index	No data available
Viscosity at 25°C	No data available
Solubility	No data available

**SECTION 10: STABILITY AND REACTIVITY****10.1. Stability**

Stable under normal temperature and pressure.

**10.2. Conditions to avoid**

Light, heat, humidity.

On contact with hot surfaces or flames this substance decomposes forming toxic and corrosive fumes. Reacts with acids to produce toxic and corrosive fumes.

**10.3. Materials to avoid**

Acids, silicates.

**10.4. Hazard decomposition products**

Contact with acids liberates toxic hydrogen fluoride gas.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1. Possible dangerous to health effects**

The substance can be absorbed into the body by inhalation of its aerosol and by ingestion.

**Inhalation.** May be harmful if inhaled vapour. May cause respiratory tract irritation.

**Ingestion.** May be harmful if swallowed.

**Skin.** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes.** Causes serious eye irritation.

Detailed: p.4.6.

**11.2. Signs and Symptoms of Exposure**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Detailed in p.4.6.

**11.3. Toxicity**

LD50 oral rat: 52 mg/kg.

**11.4. Skin corrosion/irritation**

No data available

**11.5. Serious eye damage/eye irritation**

No data available

**11.6. Respiratory or skin sensitization**

No data available.

**11.7. Germ cell mutagenicity**

No data available

**11.8. Carcinogenicity**

IARC Carcinogen category: not classifiable as a human carcinogen.

**11.9. Reproductive toxicity**

No data available

**11.10. Specific target organ toxicity - single exposure**

The substance is irritating to the eyes, the skin and the respiratory tract. Exposure when ingested could cause hypocalcaemia and hypokalaemia, resulting in central nervous system and cardiac disorders.

11.11. **Specific target organ toxicity - repeated exposure**

The substance may have effects on the bones and teeth (fluorosis).

11.12. **Aspiration hazard**

No data available.

11.13. **Additional Information**

No data available.

## SECTION 12: ECOLOGICAL INFORMATION

12.1. **Ecotoxicity**

LC50 fish (96 hours), minimum 51mg/l, maximum 830mg/l

12.2. **Mobility**

No data available

12.3. **Persistence and degradability**

Accumulated in vegetable leaves

12.4. **Bio accumulative potential**

No data available

12.5. **Results of PBT and vPvB assessment**

No data available

12.6. **Other adverse effects**

Hazardous for aquatic organisms

## SECTION 13: DISPOSAL CONSIDERATIONS

13.1. **Waste treatment methods**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contaminated packaging dispose of as unused product. Do not remove the information from package. Manage waste as required by regulatory requirements. Avoid release to the environment.

## SECTION 14: TRANSPORT INFORMATION

14.1. Not a subjects for transport regulation

## SECTION 15: REGULATORY INFORMATION

15.1. This safety datasheet complies with the requirements of Regulation (EC) No 1907/2006 as amended by Regulation (EU) No 453/2010.

15.2. Other Regulations: EINECS: Components of mixture are on the European Inventory of Existing Commercial Chemical Substances.

15.3. This safety data sheet information is not a professional risk assessment.

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

No data available.

15.5. **Chemical Safety Assessment**

No data available.

15.6. **Health, safety and environmental information**

No data available.

## SECTION 16: OTHER INFORMATION

16.1. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

16.2. UAB „Medicinos linija“ shall not be held liable for any damage resulting from handling or from contact with the above product.

16.3. The product should not be used for purposes other than specified in p.7.3 purposes.

16.4. User is responsible for the legal, regulatory compliance.

16.5. Abbreviations and acronyms used in the safety data sheet:

16.5.1. EC – European Commission

16.5.2. EEC – European Economic Community

16.5.3. EU – European Union

16.5.4. GHS – Globally Harmonized System

16.5.5. CLP – Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

16.5.6. CAS No – Chemical Abstracts Service number

16.5.7. EC No – EINECS and ELINCS Number (see also EINECS and ELINCS)

16.5.8. EINECS – European Inventory of Existing Commercial Substances

16.5.9. ELINCS – European List of notified Chemical Substances

16.5.10. EN – European Standard

16.5.11. NIOSH - National Institute for Occupational Safety and Health

16.5.12. IARC – International Agency for Research on Cancer

16.5.13. PBT - Persistent, Bio accumulative and toxic substance

16.5.14. vPvB – Very Persistent and Very Bio accumulative

16.5.15. ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road

16.5.16. RID – Regulations concerning the International Carriage of Dangerous Goods by Rail

16.5.17. UN – United Nations

16.5.18. IMDG – International Maritime Dangerous Goods

16.5.19. ICAO-TI – Technical Instructions for the Safe Transport of Dangerous Goods by Air

- 16.5.20. IATA-DGR – International Air Transport Association Dangerous Goods Regulations  
16.5.21. LC50 – Lethal Concentration to 50 % of a test population  
16.5.22. LD50 – Lethal Dose to 50% of a test population (Median Lethal Dose)  
16.6. Key literature references and sources for data: <http://echa.europa.eu>.  
16.7. List of relevant hazard statements, safety phrases and/or precautionary statements full text:

**Signal word      Danger**

- H301: Toxic if swallowed  
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H319: Causes serious eye irritation  
EUH032: Contact with acids liberates very toxic gas  
P264: Wash hands thoroughly after handling  
P270: Do not eat, drink or smoke when using this product  
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P337+P313: If eye irritation persists: Get medical advice/attention  
P501: Dispose of contents/container to licensed company  
16.8. Training advice: How to properly handle chemical substances / mixtures employees must be trained in accordance with national requirements.