



Centre Anti-Poison pour le Québec: (800) 463-5060

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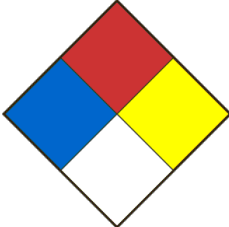
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## SAFETY DATA SHEET

### SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier SODIUM FLUORIDE		Product Use Laboratory use	
Chemical formula NaF		Product code SR-0129; SU-0129	Molar weight 41,99
Chemical name / Commercial name / Synonymous SODIUM FLUORIDE ANHYDROUS, MONOFLUORURE DE SODIUM, DIFLUORURE DISODIUM, HYDROFLUORURE DE SODIUM, TRIFLUORURE TRISODIUM, T-FLUORIDE, CHEMIFLUOR, FLOROCID, VILLIAUMITE			
Supplier's name Laboratoire MAT		Address-Street 610, Adanac Street	
City Québec		Province Québec	
Postal code G1C 7B7	Internet www.labmat.com	Phone number 418-660-8666 / 800-890-8666	
Emergency phone	CANUTEC: 613-996-6666		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
Date SDS 12/4/2018	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

## SECTION 02 - HAZARDS IDENTIFICATION

<b>Classification WHIMS / GHS</b>	Skin corrosion/irritation - Skin irritation category 2 Acute toxicity - Oral category 3 Serious eye damage/eye irritation - Eye irritation category 2
<b>Signal Word</b>	DANGER
<b>Hazards statements (H)</b>	H315 Causes skin irritation. H301 Toxic if swallowed. H319 Causes serious eye irritation.
<b>Precautionary statements (P)</b>	P264 Wash the areas of the body that have been in contact with the product after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P321 Specific treatment (see section 4 of the SDS and on this label). P332 + P313 If skin irritation occurs: Get medical advice/attention. P362 + P364 Take off contaminated clothing and wash it before reuse. P270 Do not eat, drink or smoke when using this product. P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P330 Rinse mouth. P337 + P313 If eye irritation persists: Get medical advice/attention. P405 Store locked up. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company.
<b>PICTOGRAMS</b>	
<b>Other dangers</b>	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	<b>Health</b> 2 <b>Fire</b> 0 <b>Reactivity</b> 1 <b>Special danger</b>

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Fluorure de sodium	7681-49-4	<=100

## SECTION 04 - FIRST AID MEASURES

<b>Eye contact</b>	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. See a doctor.
<b>Skin contact</b>	Wash skin with plenty of water for at least 15 minutes. First treatment with calcium gluconate paste. Remove soiled clothing. Consult a physician.
<b>Inhalation</b>	Move the unwell person to the fresh air. If breathing is difficult, give oxygen. If the victim is not breathing, give artificial respiration. If breathed in, move person into fresh air. Consult a physician.
<b>Ingestion</b>	Get immediate medical help. If the person is conscious, drink water or preferably milk. Induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
<b>Most important symptoms and effects (acute and delayed)</b>	Ref. section 11.
<b>Immediate medical attention and special treatment, if necessary</b>	In case of medical consultation, keep this sheet available.
<b>General advice</b>	Hydrofluoric (HF) acid burns require immediate and specialized first aid and medical treatment. Symptoms may be delayed up to 24 hours depending on the concentration of HF. Consult a physician. Show this safety data sheet to the doctor in attendance. After decontamination with water, further damage can occur due to penetration/absorption of the fluoride ion. Treatment should be directed toward binding the fluoride ion as well as the effects of exposure. More serious skin exposures may require subcutaneous calcium gluconate except for digital areas unless the physician is experienced in this technique, due to the potential for tissue injury from increased pressure. Absorption can readily occur through the subungual areas and should be considered when undergoing decontamination. Prevention of absorption of the fluoride ion in cases of ingestion can be obtained by giving milk, chewable calcium carbonate tablets or Milk of Magnesia to conscious victims. Conditions such as hypocalcemia, hypomagnesemia and cardiac arrhythmias should be monitored for, since they can occur after exposure. Skin exposures can be treated with a 2.5% calcium gluconate gel.

## SECTION 05 - FIREFIGHTING MEASURES

<b>Flammability</b>	No
<b>Ignition conditions</b>	Not flammable or combustible.
<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	Data not available.
<b>Hazardous combustion / decomposition products</b>	Hazardous decomposition products formed under fire conditions. - Gaseous hydrogen fluoride. - Sodium oxides.
<b>Special fire and explosion hazards</b>	Sodium fluoride releases a very toxic gas (hydrogen fluoride) on contact with acids. May react violently with incompatible products (Ref Section 10).
<b>Special protective equipment and precautions for firefighters</b>	Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus.

## SECTION 06 - ACCIDENTAL RELEASE MEASURES

<b>Methods and materials for containment and cleaning up / Personnel precautions, protective equipment</b>	Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Pick up with a shovel or broom, taking care not to scatter dust. Dispose of residues in a container provided for the disposal of hazardous materials. Do not let product enter drains. Do not let product enter drains. If it is hydrofluoric acid in solution, it may be neutralized with sodium carbonate or calcium carbonate in a mixture, optionally, depending on the quantities, with an inert material.
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## SECTION 07 - HANDLING AND STORAGE

<b>Conditions for safe storage</b>	Store in a cool, dry place. Keep container tightly closed and store away from heat, moisture, and incompatible products. Store in a well-ventilated area. Never allow product to get in contact with water during storage. Do not store near acids. Moisture sensitive. Keep in a dry place. Do not store in glass
<b>Methods of handling</b>	Do not use metal instruments to handle this product. Bottle in plastic containers only. Aqueous solutions can also corrode glass and porcelain and must be stored in plastic containers. Always open containers slowly to allow any excess pressure to vent. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust or vapor is formed.

## SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis
Sodium fluoride	7681-49-4	TWA	2.500000 mg/m <sup>3</sup>	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks				
	TWA EV 2.500000 mg/m <sup>3</sup> Canada. Ontario OELs			
		TWA	2.500000 mg/m <sup>3</sup>	Canada. British Columbia OEL
		TWA	2.500000 mg/m <sup>3</sup>	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	2.500000 mg/m <sup>3</sup>	USA. ACGIH Threshold Limit Values (TLV)
		TWA	2.500000 mg/m <sup>3</sup>	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
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<b>Data source</b>	Sigma-Aldrich (Millipore Sigma)
<b>Ventilation</b>	Fan.
<b>Respiratory</b>	If the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
<b>Gloves</b>	Handle with gloves.
<b>Eyes</b>	Safety goggles with safety shutters.
<b>Shoes</b>	Safety shoes.
<b>Clothing</b>	Labcoat.
<b>Engineering control</b>	Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values.

## SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid.
Appearance	Poudre blanche-
Odour	Donnée non disponible.
Odour threshold	Data not available
pH	Solution saturée = pH 7.4.
Melting point / Freezing point	993°C
Initial boiling point	1704°C
Boiling range	Data not available
Flash point	Data not available
Evaporation rate	Data not available
Flammability	No
Lower flammable / Explosive limit	Data not available
Upper flammable / Explosive limit	Data not available
Vapour pressure	Data not available
Vapour density	Data not available
Relative density	2.78g/cm <sup>3</sup>
Solubility	Soluble dans l'eau (40g/L à 25°C). Insoluble dans l'alcool.
Partition coefficient water/n-octanol	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	Data not available
Viscosity	Data not available

## SECTION 10 - STABILITY AND REACTIVITY

Reactivity	Non-reactive under normal conditions.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Contact with acids liberates very toxic gas.
Conditions of instability (Including sensitivity to shock / static discharge / vibration)	Avoid moisture and excessive heat. Avoid contact with incompatible materials.
Incompatible material	Strong acids and moisture.
Hazardous decomposition products	Hazardous decomposition products formed under fire conditions. - Gaseous hydrogen fluoride. - Sodium oxides.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### SODIUM FLUORIDE

Routes of exposure	Ingestion, inhalation, skin and eyes.
Acute exposition effects / symptoms:	By exposure route below.
- Eyes	Severe irritation and burns that may cause permanent eye damage.
- Skin	Severe irritation and dermatitis.
- Inhalation	Irritation of the mucous membranes and respiratory tract. Nervous disorders, chest pain, cough, dyspnea, headache, dizziness, sweating, salivation, tremors, paleness, fever, seizures, cyanosis, nausea and vomiting.
Acute toxicity (Ingestion)	Irritation and burning of the mouth, throat, esophagus and abdominal wall. Dysphagia, abdominal pain, cramps, diarrhea, melena, sweating, salivation, muscle weakness, pallor, tremors, convulsions, weak and irregular pulse, hypotension, unconsciousness, coma and can lead Ingestion of 5 to 10 grams can be fatal in adults.
Chronic exposure effects / symptoms	Burning sensation, dermatitis, conjunctivitis, lung damage, nerve disorders, chest pain, cough, dyspnea, laryngitis, headache, dizziness, confusion, irritability, sweating, salivation, fever, hypocalcemia, weight loss and loss of appetite, nausea and vomiting. NOTE: Chronic exposure can also lead to the development of fluorosis, which is characterized by increased bone fragility, joint stiffness, bone decalcification, and calcification of ligaments.
DL50 (specify species and route of entry)	LD50 Oral - Rat - 52 mg/kg. LD50 Dermal: Data not available
CL50 (specify species and route of entry)	LC50 - Inhalation - Data not available.

## SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Sodium fluoride: Toxicity to fish: Mortality NOEC - <i>Cyprinodon variegatus</i> (sheepshead minnow) - 500mg/L - 96h. LC50 - <i>Oncorhynchus mykiss</i> (rainbow trout) - 200 mg/L - 96h. Toxicity to daphnia and other aquatic invertebrates: EC50 - <i>Daphnia magna</i> (Water flea) - 98 mg/l - 48 h.
<b>Persistence and degradability</b>	Data not available.
<b>Bioaccumulative potential</b>	Bioaccumulation <i>Salmo trutta</i> - 10 d Bioconcentration factor (BCF): 2. 3
<b>Mobility in soil</b>	Data not available.
<b>Other adverse effects</b>	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

## SECTION 13 - DISPOSAL CONSIDERATIONS

<b>Waste Disposal Method</b>	Dispose of contents / container in accordance with local / regional / national / international regulations / or contact a specialist waste disposal company.
<b>Contaminated Packaging</b>	Dispose of as unused product.

## SECTION 14 - TRANSPORT INFORMATION

<b>UN Number</b>	1690
<b>UN Proper shipping name</b>	FLUORURE DE SODIUM SOLIDE
<b>Transport hazard class(es)</b>	6.1 Toxic substances
<b>Packing group</b>	III
<b>Limited quantity index</b>	5kg
<b>ERAP Index</b>	-
<b>Special precautions</b>	-

## SECTION 15 - REGULATORY INFORMATION

<b>WHIMS CANADA</b>	<p>Skin corrosion/irritation - Skin irritation category 2</p> <p>Acute toxicity - Oral category 3</p> <p>Serious eye damage/eye irritation - Eye irritation category 2</p>
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## SECTION 16 - OTHER INFORMATION

### Further information

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. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

Last Update: 12/4/2018