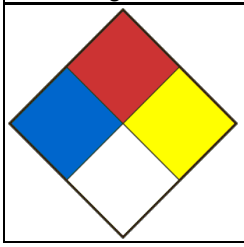
Centre Anti-Poison pour le Québec: (800) 463-5060
Tél. (Qc): (418) 660-8666 / 800-890-8666
Fax. (Qc): (418) 660-8998

SAFETY DATA SHEET

SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier FLUORIDE STANDARD 1000PPM		**Product Use** Laboratory use	
Chemical formula F		**Product code** FS-0000	**Molar weight**
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 7/20/2020	**SDS Prepared by** Laboratoire MAT	**E-Mail** labmat@labmat.com	

SECTION 02 - HAZARDS IDENTIFICATION

Classification WHIMS / GHS	Not a hazardous substance according to WHMIS 2015
Other dangers	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	**Health** 0 **Fire** 0 **Reactivity** 0 **Special danger**

SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Fluorure de sodium Eau	7681-49-4 7732-18-5	0.22 Balance

SECTION 04 - FIRST AID MEASURES

Eye contact	Wash eyes with large amounts of water for at least 15 minutes while holding eyelids apart to rinse eyes. See a doctor.
Skin contact	Wash skin with plenty of water for at least 15 minutes. First treatment with calcium gluconate paste. Remove soiled clothing. Consult a physician.
Inhalation	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.
Ingestion	Get immediate medical help. If the person is conscious, drink water or preferably milk. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Most important symptoms and effects (acute and delayed)	Ref. section 11.
Immediate medical attention and special treatment, if necessary	In case of medical consultation, keep this sheet available.
General advice	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

Flammability	No
Ignition conditions	Not flammable or combustible.
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	Do not use a heavy water stream.
Hazardous combustion / decomposition products	Hazardous decomposition products formed under fire conditions. - Gaseous hydrogen fluoride. - Sodium oxides.
Special fire and explosion hazards	When concentrated, the product reacts according to the following characteristics: Sodium fluoride releases a very toxic gas (hydrogen fluoride) on contact with acids. May react violently with incompatible products (Ref Section 10).
Special protective equipment and precautions for firefighters	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

Methods and materials for containment and cleaning up / Personnal precautions, protective equipment	Evacuate personnel to safe areas. Absorb the product with sand or vermiculite. Dilute residues with water, clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. Use breathing apparatus if necessary. When handling, wear appropriate safety equipment. Prevent further leakage or spillage if it is safe to do so. Discharge into the environment must be avoided.

SECTION 07 - HANDLING AND STORAGE

Conditions for safe storage	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
Methods of handling	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/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
Remarks				
	TWAEV 2.500000 mg/m3 Canada. Ontario OELs			
		TWA	2.500000 mg/m3	Canada. British Columbia OEL
		TWA	2.500000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	2.500000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		TWA	2.500000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWAEV	2.500000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWAEV	2.500000 mg/m3	Canada. Ontario OELs
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		TWA	2.500000 mg/m3	Canada. British Columbia OEL
		TWA	2.5 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWAEV	2.5 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	2.5 mg/m3	Canada. British Columbia OEL
		TWA	2.500000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		TWA	2.500000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
		TWA	2.5 mg/m3	USA. ACGIH Threshold Limit Values (TLV)

Data source	Sigma-Aldrich (Millipore Sigma)
Ventilation	Fan.
Respiratory	If the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
Gloves	Handle with gloves.
Eyes	Safety goggles with safety shutters.
Shoes	Safety shoes.
Clothing	Labcoat.
Engineering control	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	Liquid.
Appearance	Liquide incolore-
Odour	Donnée non disponible.
Odour threshold	Data not available
pH	5-8 (neutre) Solution saturée = pH 7.4 (NaF).
Melting point / Freezing point	Data not available
Initial boiling point	Data not available
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
Solubility	Soluble dans l'eau (40g/L à 25°C). Insoluble dans l'alcool (NaF).
Vapour density	Data not available
Relative density	Data not available
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	When pure, the product reacts with the following products: 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 Oral - Data not available.
CL50 (specify species and route of entry)	LC50 - Inhalation - Data not available.

SUMMARY

Acute exposure effects / Symptoms:	By exposure routes below.
Ingestion	To our knowledge, the product has not been fully evaluated
Inhalation	To our knowledge, the product has not been fully evaluated
Skin	To our knowledge, the product has not been fully evaluated
Eyes	To our knowledge, the product has not been fully evaluated
Chronic exposure effects / Symptoms:	To our knowledge, the product has not been fully evaluated
ETA Mix (Estimated Acute Toxicity)	LD50 Oral: >5000 mg/kg -Rat LD50 Dermal: Data not available LC50 Inhalation: Data not available

SECTION 12 - ECOLOGICAL INFORMATION

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

SECTION 13 - DISPOSAL CONSIDERATIONS

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

SECTION 14 - TRANSPORT INFORMATION

UN Number	N/R
UN Proper shipping name	
Transport hazard class(es)	
Packing group	
Limited quantity index	
ERAP Index	
Special precautions	

SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Not a hazardous substance according to WHMIS 2015

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: 7/20/2020