



COLUMBUS CHEMICAL INDUSTRIES INC.

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Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements

U.S. Department of Labor

Occupational Safety and Health Administration
 (Non-Mandatory Form)
 Form Approved
 OMB No. 1218-0072

IDENTITY (as Used on Label and List)

Sodium Fluoride

Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.

Section I

Manufacturers /Distributor Address Number Street City State and Zip Code	Emergency Telephone Number
Columbus Chemical Industries, Inc.	CHEMTREC 1-800-424-9300
N4335 Temkin Rd	Telephone Number for Information
Columbus, WI 53925-0008	920-623-2140
	Date Prepared
	05-25-2005
	Signature of Preparer (optional)

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity, Common Name(s))	CAS #	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Sodium Fluoride	7681-49-4	2.5 mg(F)/m ³	2.5 mg(F)/m ³	Not available	

Section III - Physical/Chemical Characteristics

Boiling Point	1695°C	Specific Gravity (H ₂ O = 1)	Not Available
Vapor Pressure (mm Hg)	Not available	Melting Point	993°C (1819°F)
Vapor Density (AIR = 1)	Not available	Evaporation Rate (Butyl Acetate = 1)	Negligible
Solubility in Water	4.3g in 100mL @25°C		
Appearance and Odor	White solid		

Section IV Fire and Explosion Hazard Data

Flash Point (Method Used)	Flammable Limits	LEL	UEL
Nonflammable		Not applicable	Not applicable
Extinguishing Media	Use extinguishing media appropriate for surrounding fire.		
Special Fire Fighting Procedures	In the event of a fire, wear full protective clothing and NIOSH/MSHA-approved self-contained breathing apparatus with full facepiece operated in pressure demand or other positive pressure mode.		
Unusual Fire and Explosion Hazards	May release toxic hydrogen fluoride under fire conditions. May react with silica, sand, soil and glass to produce toxic gases. Containers may explode when heated.		

Section V Reactivity Data

Stability	Unstable		Conditions to Avoid	Glass, silica, metals, heat
	Stable	X		

Incompatibility Materials to Avoid

Acids, alkalis, aluminum, glass, metals, silica.

Hazardous Decomposition or Byproducts

Hydrofluoric acid. May yield highly toxic SiF₄ from reaction with silica or glass. Sodium oxides.

Hazardous Polymerization**Conditions to Avoid**

	May Occur		Not applicable
	Will Not Occur	X	

Section VI Health Hazard Data

Routes of Entry	Inhalation ?	Skin ?	Ingestion ?
Multiple	Yes	Yes	Yes

Health Hazards (Acute and Chronic)

Fluoride exposure can reduce serum calcium levels, possibly causing fatal hypocalcemia. Exposure to dusts or mists results may result in perforation of nasal septum. Irritation and burns to skin and eyes. May cause corneal damage.

Destructive to mucous membranes, kidneys. Ingestion may lead to low blood pressure, coma and death.

Carcinogenicity	NTP	IARC Monographs	OSHA REGULATED?
	Not listed	Not listed	Not listed

Signs and Symptoms of Exposure.

Salivation, nausea, vomiting, abdominal pain, fever, labored breathing. Inhalation may result in spasm, inflammation and edema of upper respiratory tract, pulmonary edema and chemical pneumonitis.

Medical Conditions Generally Aggravated by Exposure

Expected to aggravate asthma, emphysema, other respiratory diseases.

Emergency and First Aid Procedures Call Physician, Eyes /Skin: immediately flush with large amounts of water for at least 15 minutes. Remove contaminated clothing. Assure adequate flushing of eyes by separating eyelids with fingers.

Inhalation: remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion: **DO NOT** induce vomiting give large amounts of water. General: Wash contaminated clothing promptly.

Section VII Precautions for Safe Handling and Use**Steps to be Taken in Case Material is Released or Spilled**

Evacuate area. Wear NIOSH/MSHA-approved respirator, chemical-resistant goggles, rubber boots, apron and heavy rubber gloves. Sweep up and place in a bag and hold for waste disposal. Avoid dust generation. Ventilate and wash spill area after material pickup is complete.

Waste Disposal Method Dispose of spillage in accordance with all Federal, state, and local regulations.

Precautions to be Taken in Handling and Storing

Store in a cool, dry, well-ventilated area in tightly-closed, plainly-labelled containers. Store in a resistant area. Protect against moisture, physical damage and light. Maintain adequate ventilation.

Do not ingest or breathe vapors or dust. Protect exposed tissues. Store away from heat.

Other Precautions Containers, even when empty, will retain residue and vapors. Always obey hazard warnings and handle empty containers as if they were full.

Section VII Control Measures

Respiratory Protection (Specify Type) NIOSH/ MSHA approved respirator with dust/mist cartridge

Ventilation	Local Exhaust	Necessary.	Special	Safety shower nearby.
	Mechanical (General)	Preferred.	Other	Eye wash station nearby.

Protective Gloves Chemical resistant. **Eye Protection** Chemical Safety Goggles.

Other Protective Clothing or Equipment Rubber apron, boots, dust mask.

Work /Hygienic Practices Wash exposed areas thoroughly with soap and water after handling. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Wash contaminated clothing before reuse. Do not wear contact lenses when handling this product. **DO NOT INGEST.** Do not breathe vapor or dust.

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