

# MATERIAL SAFETY DATA SHEET

24HR. EMERGENCY PHONE # CHEM-TREC 1-800-424-9300

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## SECTION 1 Product Identification

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**CHEMICAL NAME:** Bismuth (III) fluoride  
**CAS#:** 7787-61-3  
**FORMULA:** : BiF<sub>3</sub>  
**SYNONYM:** Bismuth trifluoride

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## SECTION 2 Composition and Information on Ingredients

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INGREDIENT:	CAS#	%	ACGIH (TWA)	OSHA (PEL)
Title Compound	7787-61-3	100	2.5mg/m <sup>3</sup> (as F)	2.5mg/m <sup>3</sup> (as F)

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## SECTION 3 Hazards Identification

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**EMERGENCY OVERVIEW:** Hydrolyzes in contact with moisture releasing toxic and corrosive fumes of hydrogen fluoride. Causes delayed, deep, slow healing, painful burns. Bismuth salts can cause mild kidney damage.

**PRIMARY ROUTES OF EXPOSURE:** Ingestion, inhalation, skin, eyes

**EYE CONTACT:** May cause serious eye damage. Effects may not immediately appear.

**SKIN CONTACT:** Prolonged contact with skin may cause delayed deep slow healing painful burns.

**INHALATION:** Dust or hydrofluoric acid fumes may cause severe irritation to the respiratory tract.

**INGESTION:** May cause salivation, nausea, vomiting, diarrhea, and painful abdominal burns.

**CHRONIC HEALTH EFFECTS:** Prolonged exposure to soluble fluorine compounds can cause deterioration of bone and tooth structure, and kidney damage. Prolonged exposure to bismuth compounds can cause metal line on gums, foul breath, and mild kidney damage.

**ACUTE HEALTH EFFECTS:** Fluoride poisoning may cause nausea, vomiting, diarrhea, weakness, coma, and respiratory paralysis. Hydrofluoric acid may cause eye and skin burns and pulmonary edema.

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## SECTION 4 First Aid Measures

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**EYE EXPOSURE:** Immediately flush the eyes with copious amounts of water for at least 15 minutes. Assure flushing under eyelids. A victim may need assistance in keeping their eyelids open. Get immediate competent medical attention.

**SKIN EXPOSURE:** Wash affected area with water. Remove contaminated clothes if necessary. Seek medical assistance if irritation persists.

**INHALATION:** Remove the victim to fresh air. Closely monitor the victim for signs of respiratory problems, such as difficulty in breathing, coughing, wheezing, or pain. In such cases seek immediate medical assistance.

**INGESTION:** Seek medical assistance immediately. Keep the victim calm. Give the victim water (only if conscious). Induce vomiting only if directed by medical personnel.