

# MATERIAL SAFETY DATA SHEET

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

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## SECTION 1 Product Identification

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**CHEMICAL NAME:** Ammonium fluoride  
**CAS #:** 12125-01-8  
**FORMULA:** NH<sub>4</sub>F  
**SYNONYM:** Ammonium fluoride

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## SECTION 2 Composition and Information on Ingredients

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INGREDIENT:	CAS #	%	ACGIH (TWA)	OSHA (PEL)
Title Compound	12125-01-8	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:** Toxic by inhalation, in contact with skin and if swallowed. This compound may cause fluoride poisoning by reducing cellular calcium function. Early symptoms include nausea, vomiting, diarrhea, and weakness.

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

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

**SKIN CONTACT:** May cause irritation with redness and pain. Soluble fluoride may be corrosive. Effects may not appear immediately)

**INHALATION:** Inhalation of dust may cause severe irritation to the respiratory tract, causing coughing, sore throat, and labored breathing.

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

**CHRONIC HEALTH EFFECTS:** Prolonged exposure to soluble fluorine compounds can cause deterioration of bone and tooth structure, and kidney damage.

**ACUTE HEALTH EFFECTS:** Fluoride poisoning may cause nausea, vomiting, diarrhea, weakness, coma, and respiratory paralysis

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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.

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## **SECTION 5                      Firefighting Measures**

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**FLASH POINT:** not applicable

**AUTO IGNITION TEMPERATURE:** none

**EXPLOSION LIMITS:** none

**EXTINGUISHING MEDIUM:** none required

**SPECIAL FIREFIGHTING PROCEDURES:** If involved in a fire, fire fighters should be equipped with a NIOSH approved positive pressure self-contained breathing apparatus and full protective clothing.

**HAZARDOUS COMBUSTION AND DECOMPOSITION PRODUCTS:** none

**UNUSUAL FIRE OR EXPLOSION HAZARDS:** No unusual fire or explosion hazards

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## **SECTION 6                      Accidental Release Measures**

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**SPILL AND LEAD PROCEDURES:** To avoid raising dust, small spills may be mixed with diatomaceous earth, sand, vermiculite or other suitable inert material and swept up.

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## **SECTION 7                      Handling and Storage**

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**HANDLING AND STORAGE:** Store material in a tightly sealed container.

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## **SECTION 8                      Exposure Controls and Personal Protection**

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**EYE PROTECTION:** Always wear approved safety glasses w/side shields, or safety goggles, face shield when handling a chemicals substance in the laboratory.

**SKIN PROTECTION:** Chemical-resistant.

**VENTILATION:** If possible, handle the material in an efficient fume hood.

**RESPIRATOR:** If in form of fine dust and ventilation is not available a respirator should be worn. The use of respirators requires a Respirator Protection Program to be in compliance with 29 CFR 19-10.134.

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## **SECTION 9                      Physical and Chemical Properties**

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**COLOR AND FORM:** white xtl.

**MOLECULAR WEIGHT:** 37.04

**MELTING POINT (DEG. C.):** none

**BOILING POINT:** none

**VAPOR PRESSURE:** no data

**SPECIFIC GRAVITY:** 1.009

**SOLUBILITY IN WATER:** very soluble

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## **SECTION 10                    Stability and Reactivity**

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**STABILITY:** moisture sensitive

**HAZARDOUS POLYMERIZATION:** no hazardous polymerization

**CONDITIONS TO AVOID:** contact with moisture  
**INCOMPATIBILITY:** mineral acids  
**DECOMPOSITION PRODUCTS:** none

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## **SECTION 11 Toxicological Information**

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**RTECS DATA:** Intraperitoneal (rat); LD50: 31 mg/kg. Subcutaneous (frog); LDLo: 280 mg/kg. Inhalation (rat); LDLo: 1600 ug/m3/6H/39W-I.

**MUTAGENIC EFFECTS:** no data

**TETRATOGENIC EFFECTS:** no data

**CARCINOGENIC EFFECTS:** no data

To the best of our knowledge the toxicological effects of this compound have not been fully investigated.

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## **SECTION 12 Ecological Information**

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**ECOLOGICAL INFORMATION:** No information available

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## **SECTION 13 Disposal Considerations**

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**DISPOSAL:** Dispose of in according to local state and federal regulations.

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## **SECTION 14 Transportation Information**

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Ammonium Fluoride, Class 6.1, UN 2505, PG III

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## **SECTION 15 Regulatory Information**

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**TSCA:** Listed in the TSCA inventory

**SARA (TITLE 313):** Title compound not regulated under section 313

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## **SECTION 16 Other Information**

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