

AMMONIUM FLUORIDE

1223
April 2004

CAS No: 12125-01-8
RTECS No: BQ6300000
UN No: 2505
EC No: 009-006-00-8

Neutral ammonium fluoride
NH₄F
Molecular mass: 37.0

TYPES OF HAZARD/ EXPOSURE	ACUTE HAZARDS/SYMPTOMS	PREVENTION	FIRST AID/FIRE FIGHTING
FIRE	Not combustible. Gives off irritating or toxic fumes (or gases) in a fire.		In case of fire in the surroundings: water in large amounts to knock down acid vapors, then use appropriate extinguishing agent.
EXPLOSION			

EXPOSURE		PREVENT DISPERSION OF DUST!	
Inhalation	Cough. Sore throat.	Local exhaust or breathing protection.	Fresh air, rest. Refer for medical attention.
Skin	Redness.	Protective gloves.	Remove contaminated clothes. Rinse skin with plenty of water or shower.
Eyes	Redness. Pain.	Face shield, or eye protection in combination with breathing protection if powder.	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Ingestion	Diarrhoea. Nausea. Vomiting. Abdominal pain. Burning sensation. Shock or collapse.	Do not eat, drink, or smoke during work.	Rinse mouth. Do NOT induce vomiting. Give plenty of water to drink. Refer for medical attention.

SPILLAGE DISPOSAL	PACKAGING & LABELLING
Sweep spilled substance into dry plastic containers. Carefully collect remainder, then remove to safe place. Personal protection: P3 filter respirator for toxic particles. Do NOT let this chemical enter the environment.	T Symbol R: 23/24/25 S: (1/2-)26-45 UN Hazard Class: 6.1 UN Pack Group: III Do not transport with food and feedstuffs.

EMERGENCY RESPONSE	STORAGE
Transport Emergency Card: TEC (R)-61GT5-III NFPA Code: H3; F0; R0	Separated from incompatible materials, food and feedstuffs. See Chemical Dangers. Dry. Well closed.

IMPORTANT DATA

Physical State; Appearance

COLOURLESS CRYSTALS OR WHITE POWDER.

Chemical dangers

The substance decomposes on heating producing toxic and corrosive fumes including hydrogen fluoride and ammonia. The solution in water is a weak acid. Reacts with chlorine trifluoride causing explosion hazard. Attacks glass and metal.

Occupational exposure limits

TLV: (as fluorine) 2.5 mg/m³ as TWA; BEI issued; (ACGIH 2004).

MAK: (as F, inhalable fraction) 2.5 mg/m³; Peak limitation category: II(2) (DFG 2003).

Routes of exposure

The substance can be absorbed into the body by inhalation of its aerosol and by ingestion.

Inhalation risk

No indication can be given about the rate in which a harmful concentration in the air is reached on evaporation of this substance at 20°C.

Effects of short-term exposure

The substance is irritating to the eyes, the skin and the respiratory tract. Corrosive on ingestion.

Effects of long-term or repeated exposure

The substance may have effects on the bones and teeth, resulting in fluorosis.

PHYSICAL PROPERTIES

Melting point: sublimes
Density: 1.01 g/cm³

Solubility in water, g/100 ml at 25°C: 45.3

ENVIRONMENTAL DATA

The substance is harmful to aquatic organisms.

NOTES

ADDITIONAL INFORMATION

LEGAL NOTICE

Neither the EC nor the IPCS nor any person acting on behalf of the EC or the IPCS is responsible