



Section 1 - Chemical Product and Company Identification

Product Name Ammonium Fluoroborate pure, 98%
Product Code 11605
CAS No 13826-83-0
Use for Laboratory Chemicals.
Company Name Sisco Research Laboratories Pvt. Ltd.
Address 608, B Wing, Satellite Gazebo, Andheri Ghatkopar Link Road,
Andheri (E), Mumbai - 400 099, India

Section 2 - Composition/Information on Ingredients

2.1 Substances Synonyms : Ammonium fluoroborate
Formula : Molecular weight : CAS-No. : EC-No.
: BF₄H₄N 104.84 g/mol 13826-83-0 237-531-4

Hazardous ingredients according to Regulation (EC) No 1272/2008
Component Classification Concentration
Ammonium tetrafluoroborate
CAS-No. 13826-83-0 EC-No. 237-531-4 Met. Corr. 1; Skin Corr. 1B; H290, H314 <= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 3 - Hazards Identification



Product Code 11605

3.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Corrosive to metals (Category 1), H290

Skin corrosion (Category 1B), H314

For the full text of the H-Statements mentioned in this Section, see Section 16.

3.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word Danger

Hazard statement(s)

H290

May be corrosive to metals.

H314

Causes severe skin burns and eye damage.

Precautionary statement(s)

P280

Wear protective gloves/ protective clothing/ eye protection/ face protection.

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310

Immediately call a POISON CENTER/doctor.

Supplemental Hazard

none

Statements

3.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Section 4 - First Aid Measures



Product Code 11605

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Hydrofluoric (HF) acid burns require immediate and specialized first aid a hours depending on the concentration of HF. After decontamination with wa penetration/absorption of the fluoride ion. Treatment should be directed exposure. Skin exposures can be treated with a 2.5% calcium gluconate gel exposures may require subcutaneous calcium gluconate except for digital a technique, due to the potential for tissue injury from increased pressure and should be considered when undergoing decontamination. Prevention of a obtained by giving milk, chewable calcium carbonate tablets or Milk of Ma hypocalcemia, hypomagnesemia and cardiac arrhythmias should be monitored

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician. First treatment with calcium gluconate paste.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

Section 5 - Fire Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Nitrogen oxides (NOx), Hydrogen fluoride, Borane/boron oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

Section 6 - Accidental Release Measures



Product Code 11605

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Moisture sensitive.

Storage class (TRGS 510): Non-combustible, corrosive hazardous materials

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8 - Exposure Control / Personal Protection



Product Code 11605

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industria situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If th full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

Section 9 - Physical and Chemical Properties



Product Code 11605

9.1 Information on basic physical and chemical properties

- a) Appearance Form: crystalline
Colour: colourless
- b) Odour No data available
- c) Odour Threshold No data available
- d) pH 3.5 at 5 g/l at 20 °C
- e) Melting point/freezing point Melting point/range: 230 °C
- f) Initial boiling point and boiling range No data available
- g) Flash point Not applicable
- h) Evaporation rate No data available
- i) Flammability (solid, gas) No data available
- j) Upper/lower flammability or explosive limits No data available
- k) Vapour pressure No data available
- l) Vapour density No data available
- m) Relative density 1.871 g/cm³ at 25 °C
- n) Water solubility 10.85 g/l at -2.69 °C - soluble5.26 g/l at -1.49 °C - soluble3.09 g/l at -0.99 °C - soluble12.2 g/l at 0 °C - soluble25 g/l at 16 °C - soluble
- o) Partition coefficient: n- octanol/water No data available
- p) Auto-ignition temperature No data available
- q) Decomposition temperature No data available
- r) Viscosity No data available
- s) Explosive properties No data available
- t) Oxidizing properties No data available

9.2 Other safety information

Bulk density 1 g/l

Section 10 - Stability and Reactivity



Product Code 11605

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Avoid moisture.

10.5 Incompatible materials

glass, Strong acids and strong bases, Aluminum

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Nitrogen oxides (NO_x), Hydrogen fluoride, Borane/boron oxides

Other decomposition products - No data available

In the event of fire: see section 5

Section 11 - Toxicological Information



Product Code 11605

11.1 Information on toxicological effects

Acute toxicity

No data available Ammonium tetrafluoroborate

Skin corrosion/irritation

No data available (Ammonium tetrafluoroborate)

Serious eye damage/eye irritation

No data available (Ammonium tetrafluoroborate)

Respiratory or skin sensitisation

No data available (Ammonium tetrafluoroborate)

Germ cell mutagenicity

No data available (Ammonium tetrafluoroborate)

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity

No data available (Ammonium tetrafluoroborate)

Specific target organ toxicity - single exposure

No data available (Ammonium tetrafluoroborate)

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available (Ammonium tetrafluoroborate)

Additional Information

RTECS: BQ6100000

Fluoride ion can reduce serum calcium levels possibly causing fatal hypocalcemia.

burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. (Ammonium tetrafluoroborate)

Section 12 - Ecological Information



Product Code 11605

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available(Ammonium tetrafluoroborate)

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product

Dissolve or mix the material with a combustible solvent and burn in a chem scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

Section 14 - Transport Information

14.1 UN number

ADR/RID: 3260

IMDG: 3260

IATA: 3260

14.2 UN proper shipping name

ADR/RID: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Ammonium tetrafluoroborate)

IMDG: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Ammonium tetrafluoroborate)

IATA: Corrosive solid, acidic, inorganic, n.o.s. (Ammonium tetrafluoroborate)

14.3 Transport hazard class(es) ADR/RID: 8

IMDG: 8

IATA: 8

14.4 Packaging group ADR/RID: III

IMDG: III

IATA: III

14.5 Environmental hazards ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user No data available

Section 15 - Regulatory Information



Product Code 11605

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

Section 16 - Other Information

Sisco Research Laboratories Pvt. Ltd. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.