Nanping Jianyang Xinsheng Trading CO, .LTD

ADD: No. 529, Jiahe North Road, Jianyang District, Nanping City (Office 313, Building 1, Jianyang Station Front

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MSDS FOR AMMONIUM BIFLUORIDE

**** MATERIAL SAFETY DATA SHEET ****

Note: this chemical is extremely hazardous. Do not use without taking professional advice

MSDS Number: MDMSDS-03
Date of Issue: 2022.01.01

1. Identification of substance

Synonyms: Ammonium Hydrogen Fluoride; Ammonium Bifluoride; Acid Ammonium Fluoride

Molecular Weight: 57.04 Chemical Formula: NH₄HF₂

CAS No.: 1341-49-7

UN NO.: 1727

Manufacturer/Supplier: Nanping Jianyang Xinsheng Trading Co., LTD

ADD: No. 529, Jiahe North Road, Jianyang District, Nanping City (Office 313, Building 1, Jianyang

Station Front Pedestrian Street), Fujian, China Post Code: 354200

E-mail:npjyxs20@126.com Emergency information:

2. Composition/Data on component

Ammonium Bifluoride

Chemical Entity	CAS No	Proportions(%)	EINECS#	Hazardous
AMMONIUM BIFLUORIDE	1341-49-7	98%min	215-676-4	Yes

3. Hazards identification

Hazard Symbols: T + C **Risk Phrases:** 25 34

UN Major hazard class: 8.0.

Danger! May be fatal if swallowed or inhaled. Affects Respiratory System, Heart, Skeleton, Circulatory System, Central Nervous System and Kidneys. Causes irritation and burns to skin, eyes and respiratory tract. Irritation and burn effects may be delayed. Harmful if absorbed through skin. Toxic if swallowed. Causes burns. Hygroscopic.

Potential Health Effects

Eye:

Causes eye burns.

Skin:

Causes skin burns. Contact with liquid is corrosive and causes severe burns and ulceration.

Ingestion:

Poison by ingestion. Causes gastrointestinal tract burns. Causes severe digestive tract burns with abdominal pain, vomiting, and possible death. May cause headache. May cause nausea and vomiting.

Inhalation:

May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema. Causes chemical burns to the respiratory tract. Inhalation may be fatal as a result of spasm, inflammation, edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.

Chronic:

Chronic inhalation and ingestion may cause chronic fluoride poisoning (fluorosis) characterized by weight loss, weakness, anemia, brittle bones, and stiff joints. May cause digestive tract disturbances.

4. First-aid measures

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation:

Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

5. Fire fighting measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products.

Extinguishing Media:

Use water spray to cool fire-exposed containers. Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

6. Accidental release measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions.

7. Handling and storage

Handling:

Wash thoroughly after handling. Use with adequate ventilation. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

Storage:

Keep away from heat and flame. Store in a tightly closed container.

Store in a cool, dry, well-ventilated area away from incompatible substances.

Corrosives area.

Keep away from acids.

Keep away from strong bases.

8. Exposure controls / Personal protection

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Personal Protective Equipment:

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29CFR

1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Safety phrases

\$22 Do not inhale dust.

\$26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice **\$37** Wear suitable gloves.

S45 In case of accident of if you feel unwell, seek medical advice immediately (show the label where possible).

9. Physical and chemical properties

Physical State: rhombohedral crystal

Appearance: white

Odor: pungent odor pH: Not available.

Vapor Pressure: 1 hPa @ 20 deg C

Viscosity: Not available.

Boiling Point: 239.5 deg C @ 760.00mm Hg

Freezing/Melting Point: 125 deg C

Autoignition Temperature:

Flash Point:

Explosion Limits, lower:

Not available.

Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature:

Solubility in water: 630 G/L WATER (20°C)

Specific Gravity/Density:

Molecular Formula: (NH₄)HF₂
Molecular Weight: 57.04

10. Stability and reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, moisture, temperatures above 300°C.

Incompatibilities with Other Materials:

Metals, acids, bases, glass.

Hazardous Decomposition Products:

Hydrogen fluoride, ammonia and/or derivatives.

Hazardous Polymerization:

11. Toxicological information

LD50/LC50:

Not available.

Carcinogenicity:

Ammonium hydrogen difluoride -

ACGIH: A4 - Not Classifiable as a Human Carcinogen (as F) (listed

IARC: Group 3 carcinogen (listed as ** undefined **). See actual entry in RTECS for complete information.

12. Ecological information

Ecotoxicity:

Fish toxicity:LC0 zebra-fish: 137 mg/L/96HBacteria toxicity:EC50

activated sludge: 2394 mg/L

13. Disposal considerations

Dispose of in a manner consistent with federal, state, and local regulations.

14. Transport information

IATA

Shipping Name: AMMONIUM HYDROGENDIFLUORIDE, SOLID

Hazard Class: 8 UN Number: 1727 Packing Group: II

IMO

Shipping Name: AMMONIUM HYDROGENDIFLUORIDE, SOLID

Hazard Class: 8 UN Number: 1727 Packing Group: II

RID/ADR

Shipping Name: AMMONIUM HYDROGEN DIFLUORIDE, SOLID

Hazard Class: 8 UN Number: 1727 Packing group: II

15. Regulations

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T + C

Risk Phrases:

R25 Toxic if swallowed.

R34 Causes burns.

Safety Phrases:

- S22 Do not breathe dust.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S37 Wear suitable gloves.
- S45 In case of accident or if you feel unwell, seek medical advice immediately b (show the label where possible).

16. Other information

Department of making out:

Department of looking through:

Label Hazard Warning:

DANGER! MAY BE FATAL IF SWALLOWED OR INHALED. AFFECTS RESPIRATORY SYSTEM, HEART, SKELETON, CIRCULATORY SYSTEM, CENTRAL NERVOUS SYSTEM AND KIDNEYS. CAUSES IRRITATION AND BURNS TO SKIN, EYES AND RESPIRATORY TRACT. IRRITATION AND BURN EFFECTS MAY BE DELAYED. HARMFUL IF ABSORBED THROUGH SKIN.

Label Precautions:

Do not breathe dust. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing.

Label First Aid:

In all cases call a physician immediately. First Aid procedures should be pre-planned for fluoride compound emergencies. If swallowed, administer milk, chewable calcium carbonate tablets or milk of magnesia. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing difficult, give artificial respiration. In case of skin contact wipe off any excess material then immediately flush skin with large amounts of soapy water. Remove contaminated clothing and shoes. Wash clothing before re-use. Apply bandages soaked in magnesium sulfate. In case of eye contact, immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting upper and lower eyelids occasionally.

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.