# Material Safety Data Sheet

**AMMONIUM Bifluoride Crystal** (RXSOL-81-6212-040)

## 1. Product and Company Identifaction

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|---|---|
| Product Name | RXSOL-81-6212-040 |
| Product Type | Ammonium BiFluoride |

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Stock Point : Mumbai, Gandhidham, Kolkata, Chennai, Vizag, Muscat, Fujairah

| | |
|---|---|
| Phone | +91 22 27815540 / 41 / 42 |
| Fax | +91 22 2781 1318 :::AOH :0091 9821214367 |
| Email | mail@rxmarine.com |

## 2. Composition / informationon ingredients

| SARA 313 Component | CAS Number | Purity | Dimension | Exposure Limits |
|---|---|---|---|---|
| Ammonium BiFluoride | CAS# 1341-49-7 | ~99.96% | W/V | None established |

## 3. Hazards Identification

May be fatal if inhaled, swallowed or absorbed thru the skin. Avoid all contact. Use with adequate ventilation. Wash thoroughly after use. Keep container closed.

Emergency Overview:Danger! May be fatal if swallowed or inhaled. Early symptoms include nausea, vomiting, diarrhea, and weakness. Later effects include central nervous system effects, cardiovascular effects, and death. 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.

Inhalation:May Cause Irritation and Burns to the Respiratory Tract; Symptoms May Include Coughing, Sore Throat, and Labored Breathing. Irritation and Burning Effects May Not Appear Immediately.

Ingestion:May cause Salivation, Nausea, Vomiting, Diarrhea, and Abdominal Pain, Followed by Weakness, Tremors, Shallow Respiration, Cardopedal Spasm, Convulsions, and Coma. May Cause Brain and Kidney Damage. Death May Caused by Respiratory Paralysis. Affects Heart and Circulatory System.

Skin:Causes Severe Irritation and Possibly Burns to the Skin. May be Absorbed through the Skin. Effects may not Appear Immediately.

Eye Contact:Causes Irritation. May be Extremely Irritating with Possible Burns to Eye Tissue and Permanent Eye Damage may Result.

Chronic Exposure:Chronic Exposure may Cause Mottling of Teeth and Bone Damage(osteosclerosis) and luorosis. Symptoms of Floursis Include Brittle Bones; Weight Loss, Anemia, Calcification of ligaments,eneral ill Health and Joint Stiffness.

Aggravated by Exposure:Populations that Appear to be at increased Risk from the Effects of Fluoride are Individuals that Suffer from Diabetes insipidus or some forms of Renal Impairment.

## 4. First Aid Measures

May be fatal if inhaled, swallowed or absorbed thru the skin. Avoid all contact. Use with adequate ventilation. Wash thoroughly after use. Keep container closed.

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| SKIN: | Remove contaminated clothing. Wash exposed area with soap and water. if irritation persists, seek medical attention. |

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| EYES: | Wash eyes with plenty of water for at least 15 minutes, lifting lids occasionally.<br>Seek Medical Aid. |
| INHALATION: | Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen |
| INGESTION: | If swallowed, induce vomiting immediately after giving two glasses of water. Never give anything by mouth to an unconscious person. |

## 5. Fire-fighting Measures

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| Fire Extinguisher Type: | Any means suitable for extinguishing surrounding fire |
| Fire / Explosion Hazards: | None Known |
| Fire Fighting Procedure: | Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and clothing. |

## 6. Accidental Release Measures

Absorb spill with inert material, then place in a chemical waste container. Dispose of in a manner consistent with federal, local law.

Spills: Ventilate area of Leak or Spill. Allow Only Qualified Personnel to Handle Spill. Clean-Up Personnel Require Protective Clothing and Respirator Protection from Vapors. Absorb Material with Paper Towel and Place in a Closed Contain for recovery or disposal Do Not Flush to Sewer! Decontaminate Liquid Resides in Spill Area with Sodium or Calcium Hypochlorite Solution. US Regulations (CERCLA) Require Reporting Spills and Releases to Soil, Water and Air in Excess of Reportable Quantities.

## 7. Handling and Storage

Store in a cool dry place. Do not get in eyes, on skin, on clothing. Wash thoroughly after handling.

## 8. Exposure controls and personal protection

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| Respiratory Protection | None required |
| Ventilation | Local |
| OTHER | Mechanical |
| Protective Gloves | Gloves to prevent skin exposure as rubber or vinyl |
| EYE PROTECTION | Splash Goggles |
| Other Protective Equipment | Wear appropriate clothing to prevent<br>skin exposure |

## 9. Physical and chemical properties

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| BOILING POINT | Information not available |
| VAPOR PRESSURE | Not available |
| MELTING POINT | Information not available |
| VAPOR DENSITY | Not available |
| EVAPORATION RATE | 1 |
| Appearance /Odors | Crystal |
| Flash Point | Not flammable |
| Specific Gravity | Information not available |
| Percent Volatile by<br>Evaporation Standard | ~90% |
| Auto Ignition Temp | Not applicable |
| Lower Flamm. Limit in Air | Not applicable |

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| Upper Flamm. Limit in Air | Not applicable |
| Solubility in Water | Soluble |

## 10. Stability and reactivity

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| STABILITY | Stable |
| CONDITIONS TO AVOID | see incompatibilities |
| MATERIALS TO AVOID | Potassium chlorate, Sodium nitrate, Chlorine trifluoride and calcium solution, Corrodes glass. |
| HAZARDOUS DECOMPOSITION PRODUCTS | Emits Hydrogen fluoride, NO and ammonia. |
| HAZARDOUS POLYMERIZATION | Will not occur |
| Conditions to Avoid | None known |

## 11. Toxicological information

Carcinogenic References: IARC Category – None, NTP Carcinogen - Known: No

## 12. Ecological information

Environmental Fate:No Information Found.

Environmental Toxicity:This material is not expected to be toxic to aquatic life. The LC50/96-hour values for fish are over 100 mg/l.

## 13. Disposal considerations

What ever cannot be Saved for Recovery or Recycling should be Managed in an Appropriate and Approved Waste Facility. Dispose of Container and Unused Contents in Accordance with Federal, State, and Local Requirements.

## 14. Transport information

DOT Classification: UN3287, Toxic Liquid, Inorganic, n.o.s. (Ammonium BiFluoride), 6.1, PG III

DOT Regulations may change from time to time. Please consult the most recent D.O.T. regulations.

## 15. Regulatory information

Chemical Inventory Status –
Part 1:Ingrdient Ammonium BiFluoride (1341-49-7)
TSCA Yes
EC Yes
Japan YES
Australia Yes

Chemical Inventory Status –
Part 2:Ingredient
Ammonium BiFluoride (1341-49-7)
Korea Yes
DSL Yes
NDSL No
Phil. Yes

Federal, State & International Regulations –
Part 1: Ingredient.
Ammonium BiFluoride (1341-49-7)
RQ No

TPQ No
List NO
Chemical Catg: No

Federal, State &
International Regulations –
Part 2:Ingredient
Ammonium BiFluoride (1341-49-7)
CERCLA NO
261.33 No
8(d) No

Chemical Weapons Convention: No
TSCA 12 (b):No
CDTA:No PURE crystal
SARA 311/312: Acute: YES
Chronic: YES
Fire: No
Pressure: No
Reactivity: No
Australian Hazchem Code: 2X
Poison Schedule: None allocated

## 16. Other information

Danger! May be fatal if swallowed or inhaled. Early symptoms include nausea, vomiting, diarrhea and weakness. Later effectsinclude central nervous system effects, cardiovascular efffects and death. Affects respiratory system, heart, skeleton, circulatory system, central nervous system and kidneys. . Causes severe irritation to tissues of the mucous membranes, upper respiratory tract, eyes and skin. Persons with pre existing eye, skin or respiratory conditions may be more susceptible. Ingestion may cause tremors, shallow respiration, convulsions and coma. May cause brain and kidney damage. Death may be caused by

| Revisions | NFPA |
|---|---|
| 7/30/2010 | 0.1 updated msds to 16 section from 10 section msds. STN |

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