



# HI-VALLEY CHEMICAL

## LABORATORY PRODUCTS

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# SAFETY DATA SHEET

Hi Valley Chemical

## Ammonium Bifluoride

### 1 PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier:** Ammonium Bifluoride  
**Synonyms:** Ammonium hydrogen difluoride  
**SDS Number:** R-026  
**Product Code:** 518102-1, 518102-5, 518102-10, 518102-50  
**Revision Date:** 11/9/2015  
**Version:** 1.0  
**CAS Number:** 1341-49-7  
**Supplier Details:** High Valley Products, Inc.  
1134 West 850 North  
Centerville, Utah 84014  
**Emergency:** PERS: 800-633-8253  
**Phone:** 801-295-9591  
**Email:** sales@hvchemical.com  
**Web:** www.hvchemical.com

### 2 HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

Health, Acute toxicity, 3 Oral  
Health, Skin corrosion/irritation, 1 B  
Health, Serious Eye Damage/Eye Irritation, 1

#### GHS Label elements, including precautionary statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:



#### GHS Hazard Statements:

H301 - Toxic if swallowed  
H314 - Causes severe skin burns and eye damage  
H318 - Causes serious eye damage

#### GHS Precautionary Statements:

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.  
P264 - Wash skin thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304+341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.  
P310 - Immediately call a POISON CENTER or doctor/physician.  
P363 - Wash contaminated clothing before reuse.  
P405 - Store locked up.

**3 COMPOSITION/INFORMATION ON INGREDIENTS****Ingredients:**

Cas#	%	Chemical Name
1341-49-7	100%	Ammonium bifluoride

**4 FIRST AID MEASURES**

<b>Inhalation:</b>	If inhaled, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.
<b>Skin Contact:</b>	Remove contaminated clothing and wash before reuse. Wash with soap and water. Consult a physician.
<b>Eye Contact:</b>	Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation.
<b>Ingestion:</b>	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**5 FIRE FIGHTING MEASURES**

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

**Special hazards arising from the substance or mixture**  
Nitrogen oxides (NOx), Hydrogen fluoride

**Advice for firefighters**  
Wear self-contained breathing apparatus for firefighting if necessary.

**Further information**  
No data

**6 ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures:**  
Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental precautions:**  
Do not let product enter drains.

**Methods and materials for containment and cleaning up:**  
Arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**7 HANDLING AND STORAGE**

**Handling Precautions:** Processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Avoid contact with skin and eyes. Avoid formation of dust.

**Storage Requirements:** Keep container tightly closed. Store in cool/dry well ventilated area.

**Personal Protective Equipment:**

Ammonium bifluoride (1341-49-7) [100%]

Personal protective equipment

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves 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. Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested: Dermatrill (KCL 740 / Aldrich Z677272, Size M) Splash contact data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374 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 industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Eye 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 and 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.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Ammonium bifluoride (1341-49-7) [100%]

Components with workplace control parameters

TWA 2.5 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z- 1  
Limits for Air Contaminants

TWA 2.5 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z2

TWA 2.5 mg/m3 USA. OSHA - TABLE Z-1 Limits for Air Contaminants -  
1910.1000

TWA 2.5 mg/m3 USA. ACGIH Threshold Limit Values (TLV)

TWA 2.5 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z- 1  
Limits for Air Contaminants

CAS number varies with compound

TWA 2.5 mg/m3 USA. Occupational Exposure Limits (OSHA) - Table Z2  
Z37.28- 1969

TWA 2.5 mg/m3 USA. ACGIH Threshold Limit Values (TLV)  
Bone damage Fluorosis Substances for which there is a Biological Exposure Index or Indices (see  
BEI section) Not classifiable as a human carcinogen varies

TWA 2.5 mg/m3 USA. OSHA - TABLE Z-1 Limits for Air Contaminants -  
1910.1000

<b>Appearance:</b>	White crystalline
<b>Physical State:</b>	Solid
<b>Odor:</b>	No data available
<b>Odor Threshold:</b>	No data available
<b>Solubility:</b>	No data available
<b>Spec Grav./Density:</b>	1.5
<b>Viscosity:</b>	No data available
<b>Boiling Point:</b>	No data available
<b>Freezing/Melting Pt.:</b>	Melting point/range: 125 °C (257 °F) - lit.
<b>Flash Point:</b>	No data available
<b>Partition Coefficient:</b>	No data available
<b>Vapor Pressure:</b>	No data available
<b>Vapor Density:</b>	No data available
<b>pH:</b>	No data available
<b>Evap. Rate:</b>	No data available
<b>Auto-Ignition Temp:</b>	No data available
<b>Decomp Temp:</b>	No data available
<b>UFL/LFL:</b>	No data available

<b>Reactivity:</b>	No data available
<b>Chemical Stability:</b>	Stable under recommended storage conditions.
<b>Conditions to Avoid:</b>	Moisture.
<b>Materials to Avoid:</b>	Strong Oxidizing Agents.
<b>Hazardous Decomposition:</b>	No data available

Ammonium bifluoride (1341-49-7) [100%]

Information on toxicological effects

Acute toxicity:

Oral LD50 no data available

Inhalation LC50

Dermal LD50

Other information on acute toxicity

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitisation: no data available

Germ cell mutagenicity: no data available

Carcinogenicity:

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Ammonium bifluoride)

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: no data available

Teratogenicity: no data available

Specific target organ toxicity - single exposure (Globally Harmonized System):  
no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System):

no data available

Aspiration hazard: no data available

Potential health effects: Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Ingestion Toxic if swallowed. Skin May be harmful if absorbed through skin. Causes skin burns. Eyes Causes eye burns.

Signs and Symptoms of Exposure: Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

Synergistic effects: no data available

Additional Information:

RTECS: BQ9200000

## 12 ECOLOGICAL INFORMATION

Ammonium bifluoride (1341-49-7) [100%]

Information on ecological effects

Toxicity: no data available

Persistence and degradability: no data available

Bioaccumulative potential: no data available

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: no data available

## 13 DISPOSAL CONSIDERATIONS

Ammonium bifluoride (1341-49-7) [100%]

Waste treatment methods

Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging: Dispose of as unused product.

## 14 TRANSPORT INFORMATION

UN1727, Ammonium hydrogendifluoride, solid, 8, PGII

## 15 REGULATORY INFORMATION

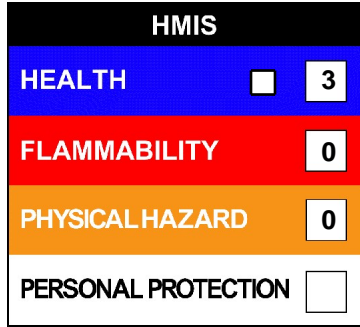
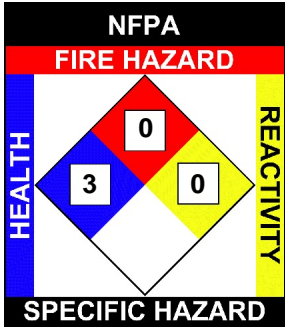
Component (CAS#) [%] - CODES  
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Regulatory CODE Descriptions

RQ = Reportable Quantity  
CERCLA = Superfund clean up substance  
CSWHS = Clean Water Act Hazardous substances  
MASS = MA Massachusetts Hazardous Substances List  
PA = PA Right-To-Know List of Hazardous Substances  
TSCA = Toxic Substances Control Act

**16** **OTHER INFORMATION**

NFPA: Health = 3, Fire = 0, Reactivity = 0, Specific Hazard = n/a  
HMIS III: Health = 3, Fire = 0, Physical Hazard = 0



**Disclaimer:**

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