



<b>NFPA</b> 	<b>HCS Risk Phrases</b> <b>HCS CLASS:</b> R36 Irritating to eyes R37 Irritating to respiratory system R38 Irritating to skin	<b>Protective Clothing</b> 
--	---	---

### Section I. Chemical Product and Company Identification

Common Name/ Trade Name	<b>AMMONIUM BICARBONATE</b>	Revision Date: 10-11-06
Supplier	FRITZ INDUSTRIES, INC. 500 SAM HOUSTON ROAD MESQUITE, TX 75149 (972) 285-5471 (800) 955-1323	In Case of Emergency. (800) 424-9300 Week Days: (972) 285-5471 (800) 955-1323

Chemical Family Inorganic salt

### Section II. Composition and Information on Ingredients

Name	CAS #	% by Weight	TLV/PEL	LC <sub>50</sub> /LD <sub>50</sub>
Ammonium Bicarbonate	1066-33-7	≥99	N/A	N/A

### Section III. Hazards Identification

Emergency overview	Harmful if inhaled. May cause irritation to skin, eyes, and respiratory tract.
Eye contact	May cause irritation, redness, and pain.
Skin	May cause irritation with redness and pain.
Inhalation	Dust may cause irritation of the nose, throat, and lungs. Ammonia vapors released upon decomposition may cause irritation of the upper respiratory tract, with coughing, vomiting, and redness to the mucous membranes. Higher concentrations (> 1000 ppm) may cause restlessness, tightness in the chest, pulmonary edema, weak pulse, and cyanosis.
Ingestion	Large oral doses may cause irritation to the gastrointestinal tract.

### Section IV. First Aid Measures

Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Seek medical attention immediately.
Skin Contact	Immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation persists. Wash clothing and thoroughly clean shoes before reuse.
Inhalation	Remove to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.
Ingestion	Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.




### Section V. Fire and Explosion Data

Fire	This material is not considered to be a fire hazard. Irritating and toxic ammonia gas may form in fires.
Explosion	Not considered to be an explosion hazard.
Fire Fighting Media and Instructions	Use any means suitable for extinguishing surrounding fire.
Special Information	In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode.

### Section VI. Accidental Release Measures

Leak/Spill	Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal. US Regulations (CERCLA) require reporting spills and releases to soil, water, and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.
------------	--

AMMONIUM BICARBONATE

<b>Section VII. Handling and Storage</b>												
Handling	Avoid contact with eyes, skin, or clothing. Do not ingest. Do not breathe dust. Wash hands after use. Observe all warnings and precautions listed for the product.											
Storage	Keep in a tightly closed container. Store in a cool, dry, ventilated area. Protect against physical damage. Store at temperatures below 80°F (27°C) to minimize decomposition. Containers of this material may be hazardous when empty since they retain product residues.											
<b>Section VIII. Exposure Controls/Personal Protection</b>												
Ventilation System	Provide local exhaust ventilation where dust or mist may be generated.											
Personal Protection	Wear chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eyewash fountain and quick-drench facilities in work area. Wear appropriate protective clothing to prevent skin contact. Wear an approved respirator.											
<b>Section IX. Physical and Chemical Properties</b>												
Physical state and Appearance	Fine crystals Odor: Slight ammonia odor Color: White											
Specific Gravity	1.59 Melting Point 107.5°C (226°F)											
Solubility	17.4% @ 20°C (68°F) in water.											
pH	7.8											
<b>Section X. Stability and Reactivity Data</b>												
Stability	Stable under ordinary conditions of use and storage											
Incompatibilities	Can react dangerously with acids, caustic alkalis and strong oxidizing agents.											
Hazardous decomposition products	Burning may produce ammonia, nitrogen oxides, carbon monoxide, carbon dioxide, and nitrogen oxides.											
Conditions to Avoid	Heat, incompatibles											
<b>Section XI. Toxicological Information</b>												
Primary Routes of Exposure	Eye and skin contact; inhalation of dust; ingestion.											
Toxic Effects on Humans	Irritation possible to skin, eyes, and respiratory and gastrointestinal tracts. May be harmful if inhaled.											
<b>Section XIV. Transport Information</b>												
DOT Classification	Not regulated under the Transport of Dangerous Goods Act.											
<b>Section XV. Other Regulatory Information and Pictograms</b>												
Other Classifications	WHMIS (Canada) Canadian DSL Inventory Status Classification: Not controlled This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.											
HMIS (U.S.A.)	<table border="0"> <tr> <td style="background-color: blue; color: white; padding: 2px;">1 HEALTH</td> <td rowspan="4" style="vertical-align: middle; padding: 0 10px;">National Fire Protection Association (U.S.A.)</td> <td rowspan="4" style="vertical-align: middle; padding: 0 10px;">Health</td> <td rowspan="4" style="text-align: center;">  </td> <td style="padding: 2px;">Fire Hazard</td> </tr> <tr> <td style="background-color: red; color: white; padding: 2px;">0 FLAMMABILITY</td> <td style="padding: 2px;">Reactivity</td> </tr> <tr> <td style="background-color: yellow; color: black; padding: 2px;">1 REACTIVITY</td> <td style="padding: 2px;">Specific Hazard</td> </tr> <tr> <td style="background-color: white; border: 1px solid black; padding: 2px;">e PROTECTIVE EQUIPMENT</td> <td></td> </tr> </table>	1 HEALTH	National Fire Protection Association (U.S.A.)	Health		Fire Hazard	0 FLAMMABILITY	Reactivity	1 REACTIVITY	Specific Hazard	e PROTECTIVE EQUIPMENT	
1 HEALTH	National Fire Protection Association (U.S.A.)	Health					Fire Hazard					
0 FLAMMABILITY							Reactivity					
1 REACTIVITY							Specific Hazard					
e PROTECTIVE EQUIPMENT												
<b>Section XVI. Other Information</b>												
<b>Notice to Reader</b> The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Fritz Industries, Inc. assumes no responsibility for personal injury or property damage to vendees, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of the material.												