



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

1533 W. Henrietta Rd.  
Avon, New York 14414  
(716) 226-6177

MSDS No. AA 221  
Effective Date January 20, 1999

## SECTION V HEALTH HAZARD DATA

AA 221

### Threshold Limited Value

None established.

### Effects of Overexposure

Ammonium bicarbonate is of relatively low toxicity. It may cause irritation to sensitive skin and mucous membranes and can irritate or burn the eyes. Dust inhalation may cause discomfort or irritation. Ingestion could be harmful. Possible gastrointestinal irritation. Exercise appropriate procedures to minimize potential hazards.

### Emergency and First Aid Procedures

**EYES:** Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.  
**SKIN:** Flush thoroughly with water, then wash with mild soap and water. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. **INGESTION:** If swallowed, if conscious, give several glasses of water or milk to drink. Call physician. Never give anything by mouth to an unconscious person.

## SECTION VI REACTIVITY DATA

Stability	Unstable	Conditions to Avoid	Comparatively stable unless heated. Heating above 60°C causes decomposition.
	Stable	X	

Incompatibility (Materials to Avoid)	Acids and alkalis.
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Hazardous Decomposition Products	Ammonia and carbon dioxide gas.
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Hazardous Polymerization		Conditions to Avoid
May Occur	Will Not Occur	Not applicable.
	X	

## SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled	Recover for use if not contaminated. Sweep up spill and place in a suitable container for proper disposal. Flush spill area with plenty of soap and water.
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Waste Disposal Method	Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.
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Dispose of in accordance with federal, state and local regulations.

## SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	None should be needed in normal laboratory handling. If dusty conditions prevail, work in ventilation hood. If necessary wear a NIOSH/MSHA-approved dust mask or respirator containing ammonia canister.
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Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.

Protective Gloves	Rubber.	Eye Protection	Chemical safety glasses.
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Other Protective Equipment	Goggles, smock, apron, ventilation hood, proper gloves, eye wash station.
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## SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing	Store in a cool, dry, well-ventilated area away from acids, alkalis, heat or moisture. Wash thoroughly after handling.
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Other Precautions	Read label on container before using. Do not wear contact lenses when working with chemicals.
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Heat will decompose ammonium bicarbonate quickly to give ammonia gas and carbon dioxide gas. Moisture will do the same slowly. Avoid contact with skin, eyes and mucous membranes. Remove and wash contaminated clothing.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Revision	No. 4	Date	1/20/99	Approved	Michael Raszeja	Chemical Safety Coordinator	MR
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## SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	AMMONIUM BICARBONATE
Chemical Synonyms	Ammonium Hydrogen Carbonate
Formula	NH <sub>4</sub> HCO <sub>3</sub>
Unit Size	up to 2.5 Kg.
C.A.S. No.	1066-33-7

CHEMTREC  
800-424-9300  
Day 716-226-6177

NFPA HAZARD RATING  
LEAST SLIGHT MODERATE HIGH EXTREME  
0 1 2 3 4

Health	1
Fire	0
Reactivity	1

HMIS \*  
HIGH EXTREME  
3 4

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Ammonium Bicarbonate	100%	None established.

CAUTION! EVOLVES IRRITANT FUMES. HARMFUL IF INHALED AS DUST OR FUME.

MAY CAUSE IRRITATION TO EYES, SKIN AND MUCOUS MEMBRANES.

## SECTION III PHYSICAL DATA

Melting Point (°F)	Decomposes at 36°-60°C (86°-140°F)	Specific Gravity (H <sub>2</sub> O = 1)	1.573
Boiling Point (°F)	Sublimes on heating.	Percent Volatile by Volume (%)	Negligible at room temp.
Vapor Pressure (mm Hg)	60 mm @ 25°C	Evaporation Rate ( )	Not applicable.
Vapor Density (Air=1)	Not applicable.		
Solubility in Water	17.4% in water at 20°C. 12% at 0°C.		
Appearance & Odor	A fine white crystalline product with a slight ammonia odor.		

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	Non-flammable.	Flammable Limits in Air % by Volume	N/A	Lower	Upper
Extinguisher Media	Use any media for extinguishing the supporting fire.				

### SPECIAL FIREFIGHTING PROCEDURES

Inherent fire suppressant. In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and protective clothing.

### UNUSUAL FIRE AND EXPLOSION HAZARDS

Sublimes on heating. Releases ammonia, a toxic fume, on heating. Decomposes to give ammonia and carbon dioxide gas. Mixtures of about 16-25% (by volume) ammonia gas in air are flammable.

D.O.T. NON-REGULATED.

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20