



ALDON CORPORATION

MATERIAL SAFETY DATA SHEET

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MSDS No.: AA0264 AA0265
Effective Date: January 1, 2007

SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

Product	Ammonium Hydroxide, 28-30%
Chemical Synonyms	Ammonium Hydroxide, Water Solution
Formula	NH ₄ OH
Unit Size	up to 3.785 Lt.
C.A.S. No.	1336-21-6



CHEMTREC
800-424-9300
Day 585-226-6177

Health	3
Fire	1
Reactivity	2

NFPA

HAZARD RATING				
MINIMAL	SLIGHT	MODERATE	SERIOUS	SEVERE
0	1	2	3	4

HMIS*

SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Ammonium hydroxide	~ 28-30% as Ammonia	25 ppm in air as ammonia
Water: (CAS No. 7732-18-5)	~70-72%	None established.

DANGER! CORROSIVE! POISON!

CAUSES SEVERE BURNS. MAY BE FATAL IF SWALLOWED OR INHALED. VAPOR EXTREMELY IRRITATING.

SECTION III PHYSICAL DATA

Melting Point (°F)	-77°C (-106°F)	Specific Gravity (H ₂ O = 1)	0.900
Boiling Point (°F)	36°C (97°F)	Percent Volatile by Volume (%)	100%
Vapor Pressure (mm Hg)	115 mm @ 20°C (68°F)	Evaporation Rate (Water = 1)	1
Vapor Density (Air=1)	0.6 - 1.2		
Solubility in Water	Complete.		
Appearance & Odor	Water, white liquid; strong, pungent ammonia odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	N/A	Flammable Limits in Air % by Volume	Lower	Upper
		NH ₃ Gas	16	25
Extinguisher Media	Use any media for extinguishing the supporting fire.			

SPECIAL FIREFIGHTING PROCEDURES

Wear full protective clothing with respirator mask having ammonia vapor canister, or NIOSH/MSHA-approved self-contained breathing apparatus.

(2004 EMERGENCY RESPONSE GUIDEBOOK, RSPA P 5800.9, GUIDE PAGE NO. 154)

UNUSUAL FIRE AND EXPLOSION HAZARDS

Vapors formed from this product are heavier than air and may travel along the ground to a distant source of ignition. Fire may produce irritating, corrosive and/or toxic fumes.

Auto-ignition Temperature 651°C (1204°F).

D.O.T. Ammonia solutions, 8, UN2672, PG III, Ltd Qty ≤ 5 Lt.

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

SECTION V HEALTH HAZARD DATA AA0264

Threshold Limited Value As Ammonia gas TWA: 25 ppm; STEL: 35 ppm (ACGIH 2001).
Oral Rat-LD50 350 mg/Kg.

Effects of Overexposure Material is extremely destructive to tissue of the mucous membranes, upper respiratory, gastrointestinal and digestive tract, eyes and skin. Inhalation may be fatal as a result of spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema. Symptoms of overexposure may include burning sensation, shortness of breath, headache, nausea, vomiting, convulsions and shock. Target organs: Eyes, skin and mucous membranes.

Emergency and First Aid Procedures
INGESTION: Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person. **EYES:** Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. **SKIN:** Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention. **INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable		Conditions to Avoid	Excessive temperature.
	Stable	X		

Incompatibility (Materials to Avoid) Acids, strong oxidizers, halogens, heavy metals.

Hazardous Decomposition Products Decomposes to ammonia gas and above 450°C (842°F) to hydrogen gas and nitrogen oxides.

Hazardous Polymerization	Conditions to Avoid
May Occur	Will Not Occur
	X

Not applicable.

SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled Wearing protective equipment, carefully neutralize with sodium bisulfate. Absorb with inert dry material and place in suitable container for proper disposal.

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.

Dispose of in accordance with Federal, State and Local regulations.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type) Work in ventilation hood or wear a NIOSH/MSHA-approved respirator with ammonia canister if necessary.

Ventilation	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.

Protective Gloves	Rubber.	Eye Protection	Chemical safety goggles.
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Other Protective Equipment Faceshield, lab coat, vented hood, proper gloves, eye wash station.

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing Store at 75°F. Store away from sources of ignition, separate from acids. Store in a well-ventilated area. Wash thoroughly after handling.

Other Precautions Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Avoid contact with eyes, skin and mucous membranes. Avoid breathing vapor. Use with adequate ventilation. Remove and wash contaminated clothing.

Revision No. 11	Date 01/01/07	Approved James A. Bertsch	Chemical Safety Coordinator JAB
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