



Centre Anti-Poison pour le Québec: (800) 463-5060

Tél. (Qc): (418) 660-8666 / 800-890-8666


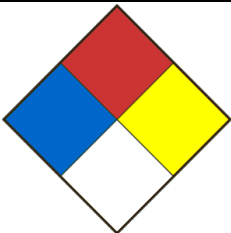
Fax. (Qc): (418) 660-8998

## SAFETY DATA SHEET

### SECTION 01 - PRODUCT AND COMPANY IDENTIFICATION

Product Identifier AMMONIUM HYDROXIDE (28-30% W/W HN3)		Product Use Laboratory use	
Chemical formula NH <sub>4</sub> OH		Product code AR-0133	Molar weight 35,05
Chemical name / Commercial name / Synonymous Ammoniaque, Ammonia water, Aqueous ammonia, Ammoniac 28-30%			
Supplier's name Laboratoire MAT		Address-Street 610, Adanac Street	
City Québec		Province Québec	
Postal code G1C 7B7	Internet www.labmat.com	Phone number 418-660-8666 / 800-890-8666	
Emergency phone	CANUTEC: 613-996-6666		CENTRE ANTI-POISON DU QUÉBEC 800-463-5060
Date SDS 2/10/2022	SDS Prepared by Laboratoire MAT	E-Mail labmat@labmat.com	

## SECTION 02 - HAZARDS IDENTIFICATION

<b>Classification WHIMS / GHS</b>	Acute toxicity - Oral category 4 Serious eye damage/eye irritation - Serious eye damage category 1 Skin corrosion/irritation - Skin corrosion category 1
<b>Signal Word</b>	DANGER
<b>Hazards statements (H)</b>	H302 Harmful if swallowed. H318 Causes serious eye damage. H314 Causes severe skin burns and eye damage.
<b>Precautionary statements (P)</b>	P264 Wash the areas of the body that have been in contact with the product after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/protective clothing/eye protection/face protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously 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. P321 Specific treatment (see section 4 of the SDS and on this label). P330 Rinse mouth. P501 Dispose of contents/container in accordance with local / regional / national / international regulations or contact a specialist waste disposal company. P260 Do not breathe dust / fume / gas / mist / vapors / spray. P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P363 Wash contaminated clothing before reuse. P405 Store locked up. P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
<b>PICTOGRAMS</b>	
<b>Other dangers</b>	NFPA (Risk: 0=No risk; 1=Slight; 2=Moderate; 3=Signifiant; 4=Extreme)
	<b>Health</b> 3 <b>Fire</b> 1 <b>Reactivity</b> 2 <b>Special danger</b>

## SECTION 03 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingrédients (Dénomination chimique / synonymes)	Numéro CAS et tout identificateur unique	Concentration (%)
Hydroxyde d'ammonium	1336-21-6	56-62
Eau	7732-18-5	Balance

## SECTION 04 - FIRST AID MEASURES

<b>Eye contact</b>	If irritation persists, seek medical attention.
<b>Skin contact</b>	Wash skin with plenty of water for at least 15 minutes. Remove soiled clothing. If irritation persists, seek medical attention.
<b>Inhalation</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
<b>Ingestion</b>	If the person is conscious, give water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician.
<b>Most important symptoms and effects (acute and delayed)</b>	The product is a material corrosive. Main symptoms of high exposure: Chemical burns of the skin, eyes and respiratory and digestive mucous membranes. Eye damage. Irritation of the nose and throat. Breathing difficulties. Pulmonary edema. Effects may be delayed. Ref. section 11.
<b>Immediate medical attention and special treatment, if necessary</b>	In case of medical consultation, keep this sheet available.
<b>General advice</b>	Move out of dangerous area. Consult a physician. Show this safety data sheet to the doctor in attendance.

## SECTION 05 - FIREFIGHTING MEASURES

<b>Flammability</b>	No
<b>Ignition conditions</b>	Not flammable or combustible.
<b>Suitable extinguishing media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Unsuitable extinguishing media</b>	Data not available.
<b>Hazardous combustion products</b>	Hazardous combustion products formed under fire conditions: - nitrogen oxides (NOx). Ammonia.
<b>Special fire and explosion hazards</b>	May react violently with incompatible products (Ref Section 10).
<b>Special protective equipment and precautions for firefighters</b>	Discard incompatible substances if this can be done without risk. Firefighters should be equipped with standard protective equipment, fireproof clothing, face mask, gloves, protective boots and, where appropriate, self-contained breathing apparatus.

## SECTION 06 - ACCIDENTAL RELEASE MEASURES

<b>Methods and materials for containment and cleaning up / Personnal precautions, protective equipment</b>	Evacuate personnel to safe areas. Absorb the product with sand or vermiculite. Dilute residues with water, clean and rinse. Ensure a good ventilation of the premises. Dispose of residues in a container for disposal of hazardous materials. When handling, wear suitable safety equipment. Use breathing apparatus if necessary. Avoid breathing vapors, mist or gas. Do not let product enter drains.
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## SECTION 07 - HANDLING AND STORAGE

<b>Conditions for safe storage</b>	Store in a well-ventilated area. Store in a cool, dry place. Keep container tightly closed and store away from incompatible products, heat, sparks, and open flame. Over time, the pressure can increase and inflate the containers.
<b>Methods of handling</b>	Release of toxic ammonia vapor. This product has a very strong odor. Ensure good ventilation. Use a hood preferably. Avoid ingestion and inhalation. Always open containers slowly to allow any excess pressure to vent. Wear personal protective equipment when handling. Always ensure good ventilation. Transport according to TDG (ref Section 14)

## SECTION 08 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### Workplace control parameters

Composants	No.-CAS	Value	Control parameters	Basis
Ammoniac, anhydrous	7664-41-7	VEMP	25 ppm 17 mg/m <sup>3</sup>	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		VECD	35 ppm 24 mg/m <sup>3</sup>	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants
		TWA	25 ppm 17 mg/m <sup>3</sup>	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		STEL	35 ppm 24 mg/m <sup>3</sup>	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
		TWA	25 ppm	Canada. British Columbia OEL
		STEL	35 ppm	Canada. British Columbia OEL

Based on ammonia, anhydrous

<b>Data source</b>	Sigma-Aldrich (Millipore Sigma)
<b>Ventilation</b>	Fan.
<b>Respiratory</b>	If work under the hood is not possible, or if the permissible levels are exceeded, use a mechanical filter / cartridge against NIOSH vapors or a respirator with air supply.
<b>Gloves</b>	Handle with gloves.
<b>Eyes</b>	Safety goggles with safety shutters. Face shield (20 cm minimum).
<b>Shoes</b>	Safety shoes.
<b>Clothing</b>	Labcoat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
<b>Engineering control</b>	Have safety showers and eyewash stations in the workplace in case of an emergency and a ventilation system to maintain the level of concentrations in the air below the exposure limit values.

## SECTION 09 - PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state</b>	Liquid.
<b>Appearance</b>	Liquide incolore-
<b>Odour</b>	Odeur suffocante.
<b>Odour threshold</b>	Data not available
<b>pH</b>	pH= 11.6 (1.0 N solution); 11.1 (0.1 N solution); 10.6 (0.01 N solution).
<b>Melting point / Freezing point</b>	-60°C
<b>Initial boiling point</b>	38 - 100 °C (100 - 212 °F) à 1,013 hPa (760 mmHg)-
<b>Boiling range</b>	Data not available
<b>Flash point</b>	Data not available
<b>Evaporation rate</b>	Data not available
<b>Flammability</b>	No
<b>Lower flammable / Explosive limit</b>	16% v/v
<b>Upper flammable / Explosive limit</b>	27% v/v
<b>Vapour pressure</b>	153 hPa (115mmHg) @ 20°C-
<b>Vapour density</b>	1.21 (Air=1)-
<b>Relative density</b>	0.90g/ml à 25°C
<b>Solubility</b>	Miscible avec l'eau.
<b>Partition coefficient water/n-octanol</b>	Data not available
<b>Auto-ignition temperature</b>	651°C
<b>Decomposition temperature</b>	Data not available
<b>Viscosity</b>	Data not available

## SECTION 10 - STABILITY AND REACTIVITY

<b>Reactivity</b>	Basic product, reacts violently with strong acids.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Possibility of hazardous reactions</b>	Stable under normal conditions.
<b>Conditions of instability (Including sensitivity to shock / static discharge / vibration)</b>	Avoid contact with incompatible materials and extreme temperatures.
<b>Incompatible material</b>	Acids, strong oxidizing agents, acrolein, iodine, aluminum, silver, bromine, calcium hypochlorite, chlorine, copper, and its alloys, dimethyl sulphate, iron galvanized, iodine, zinc, mercury, silver salts, nitromethane, gold, bleaches, propylene oxide, heat and moisture.
<b>Hazardous decomposition products</b>	Hazardous decomposition products formed under fire conditions. - nitrogen oxides (NOx). Ammonia.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### AMMONIUM HYDROXIDE (28-30% W/W NH3)

<b>Routes of exposure</b>	Inhalation and eyes.
<b>Acute exposition effects / symptoms:</b>	By exposure route below.
<b>- Eyes</b>	Causes eye burns.
<b>- Skin</b>	May be harmful if absorbed through skin. Causes skin burns.
<b>- Inhalation</b>	May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
<b>Acute toxicity (Ingestion)</b>	Burns and ulcerations of the mouth, throat and esophagus. Dysphagia, abdominal pain, cramps, diarrhea, hematemesis, headache, dizziness, possible perforation of the stomach and esophagus, stenosis, tremors, convulsions, stupor, circulatory collapse, unconsciousness, coma and can lead to death .
<b>Chronic exposure effects / symptoms</b>	Burning sensation, dermatitis, conjunctivitis, nervous disorders, eye and lung damage, chest pain, cough, dyspnoea, laryngitis, headache, dizziness, confusion, irritability, tearing, choking, sweating, salivation, tremors, fatigue loss of weight and loss of appetite, convulsions, nausea and vomiting.
<b>DL50 (specify species and route of entry)</b>	LD50 Oral - Rat - 350 mg/kg. (NH3) LD50 Dermal - Data not available.
<b>CL50 (specify species and route of entry)</b>	LC50 Inhalation - Rat - 4h - 2000 ppm (NH3)

## SECTION 12 - ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	Data not available.
<b>Persistence and degradability</b>	Data not available.
<b>Bioaccumulative potential</b>	Data not available.
<b>Mobility in soil</b>	Data not available.
<b>Other adverse effects</b>	Very toxic to aquatic life. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

## SECTION 13 - DISPOSAL CONSIDERATIONS

<b>Waste Disposal Method</b>	Dispose of contents / container in accordance with local / regional / national / international regulations / or contact a specialist waste disposal company.
<b>Contaminated Packaging</b>	Dispose of as unused product.

## SECTION 14 - TRANSPORT INFORMATION

UN Number	2672
UN Proper shipping name	AMMONIAC EN SOLUTION aqueuse contenant plus de 10% mais au maximum 35% d'ammoniac
Transport hazard class(es)	8 Corrosive substances
Packing group	III
Limited quantity index	5L
ERAP Index	-
Special precautions	-

## SECTION 15 - REGULATORY INFORMATION

WHIMS CANADA	Acute toxicity - Oral category 4 Serious eye damage/eye irritation - Serious eye damage category 1 Skin corrosion/irritation - Skin corrosion category 1
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## SECTION 16 - OTHER INFORMATION

### Further information

The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. It does not represent any guarantee of the properties of the product. Laboratoire MAT Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

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