Material Safety Data Sheet

LA2129
Ammonium hydroxide 26 Be

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Id: LA2129
Product Name: Ammonium hydroxide 26 Be
Synonyms: Aqua ammonia water
Chemical Family: None Known
Application: Fertilizer. Pharmaceutical. Bleaching agent. Explosive.

Distributed By:

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Preparation date of MSDS: 02/22/2002

Prepared By: The Safety, Health and Environment Department of Univar Canada Ltd.

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Univar USA. Inc. Corporate Office Number: (425) 889-3400

2. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components:

Ingredients	Percent	LD50s and LC50s Route & Species:
Ammonia 7664-41-7	28-30	Inhalation LC50 (Rat) 2000 ppm/4H Inhalation LC50 (Mouse) 4230 ppm/1H

Notes: No additional remark.

3. HAZARDS IDENTIFICATION

Potential Acute Health Effects:

Eye Contact:	Liquid, vapor, or mist causes irritation, experienced as stinging, excess blinking and tear production, with excess redness of the conjunctiva. Corrosive to eye tissue and may cause severe damage and blindness.
Skin Contact:	Corrosive. May cause redness and blistering of skin.
Inhalation:	Causes severe respiratory irritation. Excessive inhalation causes headache, dizziness, nausea and incoordination. Material is irritating to mucous membrane and upper respiratory tract. Exposure can cause coughing, chest pains and difficulty in breathing. Causes lung irritation.
Ingestion:	Corrosive. Causes burns to the mouth, throat and stomach. Ingestion may cause gastrointestinal irritation or ulceration.

4. FIRST AID MEASURES

Eye Contact:	In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.
Skin Contact:	In case of contact, immediately flush skin with plenty of water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before reuse. Remove contaminated shoes and discard.
Inhalation:	Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.
Ingestion:	Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.
Notes To Physician:	Treatment based on sound judgment of physician and individual reactions of patient.

5. FIRE FIGHTING MEASURES

Flash Point (C):	None - will not burn.	**(F):**	None - will not burn.
Flash Point Method:	Not applicable.		
Autoignition Temperature (C):	671	**(F):**	1240
Flammable Limits in Air - Lower (%):	16		
Flammable Limits in Air - Upper (%):	27		

Extinguishing Media:	Use extinguishing media appropriate for surrounding fire. Use water spray to cool fire exposed surfaces.
Special Exposure Hazards:	Emits toxic fumes under fire conditions. During a fire, oxides of nitrogen may be produced. The vapors may explode at high temperatures if brought in contact with an ignition source.
Special Protective Equipment:	Fire fighters should wear full protective clothing, including self-contained breathing equipment.
NFPA RATINGS FOR THIS PRODUCT ARE:	HEALTH 2, FLAMMABILITY 1 , REACTIVITY 0
HMIS RATINGS FOR THIS PRODUCT ARE:	Not available

6. ACCIDENTAL RELEASE MEASURES

Procedure for Clean Up: Isolate hazard area and restrict access. Neutralize with lime slurry, limestone, or soda ash. Use water fog to knock down vapours; contain runoff. Small spills: soak up with absorbent material and scoop into containers. Large spills : prevent contamination of waterways. Dike and pump into suitable containers. Clean up residual with absorbent material, place in appropriate container and flush with water.

Personal Precautionary Measures: Wear appropriate protective equipment.

Environmental Precautionary Measures: Prevent entry into sewers or streams, dike if needed. Consult local authorities.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapor. Keep away from heat, sparks and flame. Handle and open containers with care.

Storage: Store in a cool, dry, well ventilated area, away from heat and ignition sources. Keep away from direct sunlight. Place away from incompatible materials. Store below 27 C (80 F). Protect against physical damage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use process enclosure, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

Respiratory Protection: If exposure exceeds occupational exposure limits, use an appropriate NIOSH-approved respirator. Use self-contained breathing apparatus in high vapor concentrations.

Gloves: Butyl rubber gloves.

Skin Protection: Apron, coveralls and/or other resistant protective clothing. Boots.

Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.

Other Personal Protection Data: Ensure that eyewash stations and safety showers are proximal to the work-station location.

Hazardous Components:

Ingredients	Percent	Exposure Limit - ACGIH	Exposure Limit - OSHA
Ammonia 7664-41-7	28-30	25 ppm TLV-TWA 35 ppm STEL	27 mg/m³ STEL 35 ppm STEL

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	Clear
Odor:	Strong, Pungent Ammonia odour
pH	11.6 (1% soln)
Specific Gravity:	0.90
Boiling Point (C):	27 **(F):** 80.6
Freezing/Melting Point (C):	-77 **(F):** -106
Vapor Pressure:	Not Available.
Vapor Density:	Not Available.
% Volatile by Volume:	100%
Evaporation Rate:	Not Available.
Solubility:	Not Available.
VOCs (lbs/gallon):	Not Available.
Viscosity:	Not Available.
Molecular Weight:	Not Available.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Adding NaOH to this material and or heating will volatize NH3.
Materials to Avoid: Strong oxidizers. Strong acids. Halogens. Mineral acids. Contact with copper. Zinc. Tin. Aluminum and alloys. Acrolein.
Hazardous Decomposition Products: Oxides of nitrogen.
Additional Information: No additional remark.

11. TOXICOLOGICAL INFORMATION

Principle Routes of Exposure
Ingestion: Corrosive. Causes burns to the mouth, throat and stomach. Ingestion may cause gastrointestinal irritation or ulceration.
Skin Contact: Corrosive. May cause redness and blistering of skin.
Inhalation: Causes severe respiratory irritation. Excessive inhalation causes headache, dizziness, nausea and incoordination. Material is irritating to mucous membrane and upper respiratory tract. Exposure can cause coughing, chest pains and difficulty in breathing. Causes lung irritation.
Eye Contact: Liquid, vapor, or mist causes irritation, experienced as stinging, excess blinking and tear production, with excess redness of the conjunctiva. Corrosive to eye tissue and may cause severe damage and blindness.
Other:

Acute Test of Product:
Acute Oral LD50: Not Available.
Acute Dermal LD50: Not Available.
Acute Inhalation LC50: Not Available.

Carcinogenicity:

Hazardous Components:

Ingredients	Percent	IARC - Group 1	IARC - Group 2A	IARC - Group 2B	IARC - Group 3	IARC - Group 4
Ammonia 7664-41-7	28-30	Not Listed.	Not Listed.	Not listed.	Not listed.	Not listed.

Hazardous Components:

Ingredients	Percent	ACGIH - Carcinogens
Ammonia 7664-41-7	28-30	Not listed.

Carcinogenicity Comment: Not listed with IARC, NTP, ACGIH or OSHA as a carcinogen.

Genotoxicity: Not Available.
Reproductive/Developmental Not Available.

Toxicity:
Teratogenicity: Not Available.
Embryotoxicity: Not Available.
Mutagenicity: Not Available.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

Hazardous Components:

Ingredients	Percent	Ecotoxicity - Fish Species Data	Acute Crustaceans Toxicity:	Ecotoxicity - Freshwater Algae Data
Ammonia 7664-41-7	28-30	Not Available.	Not Available.	Not Available.

Other Information: This material is expected to be toxic to aquatic life.

13. DISPOSAL CONSIDERATIONS

Disposal of Waste Method:
Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.

Contaminated Packaging:
Empty containers should be recycled or disposed of through an approved waste management facility.

14. TRANSPORT INFORMATION

DOT (U.S.):
DOT Shipping Name: Ammonia Solution
DOT Hazardous Class 8
DOT UN Number: Not Applicable.
DOT Packing Group: III
DOT Reportable Quantity (lbs): Not Applicable.
Marine Pollutant: No.

ICAO/IATA:
IATA Proper Shipping Name: Ammonia Solution
IATA Hazard Class: 8
UN/NA Number: UN2672
Packing Group: III
IATA Label: Corrosive.
Remarks: No additional remark.

IMDG:
IMDG Proper Shipping Name: Ammonia Solution
Hazard Class: 8
Packing Group: III
Marine Pollutant: No.
IMDG Label: Corrosive.
Remarks: No additional remark.

TDG (Canada):

TDG Proper Shipping Name:	AMMONIA SOLUTION
Hazard Class:	8
UN Number:	UN2672
Packing Group:	III
Note:	No additional remark.
Marine Pollutant:	No.

15. REGULATORY INFORMATION

U.S. TSCA Inventory Status: All components of this product are either on theToxic Substances Control Act (TSCA) Inventory List or exempt.

Canadian DSL Inventory Status: All components of this product are either on the Domestic Substances List (DSL) or the Non-Domestic Substances List (NDSL) or exempt.

U.S. Regulatory Rules

Hazardous Components:

Ingredients	Percent	CERCLA/SARA - Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
Ammonia 7664-41-7	28-30	LISTED	LISTED	LISTED

California Proposition 65: Not Listed.

MA Right to Know List: Listed.

New Jersey Right-to-Know List: Listed.

Pennsylvania Right to Know List: Listed.

WHMIS Hazardous Class D1B TOXIC MATERIALS
E CORROSIVE MATERIAL

16. OTHER INFORMATION

Additional Information: This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS containsall the information required by the CPR.

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*****END OF MSDS*****