



## Safety Data Sheet

Date of Issue: 01.04.2021

Date of Expiry: 01.04.2026

### 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name : **ECP Limited**  
Address : PO Box 34125, Birkenhead, Auckland 0746  
Telephone : +64 9 480 4386  
Facsimile : +64 9 480 4385  
Emergency phone number : 0800 243 622 (24 hours)

Product	Ammonium hydroxide 28%-30%			Code	11801
CAS#	HSNO#	UN #	DG Class/es	Packing group #	
1336-21-6	HSR001526	2672	8	III	

Recommended use : Laboratory Investigations

### 2: Hazard's identification

#### Environmental Protection Authority (New Zealand)

#### HSNO Classification - Health Hazards

6.1D Acutely toxic  
8.1A Corrosive to metals  
8.2C Corrosive to dermal tissue  
8.3A Corrosive to ocular tissue  
9.1A Very ecotoxic in the aquatic environment  
9.3C Harmful to terrestrial vertebrates

#### GHS Label elements, including precautionary statements



Signal Word: Danger

#### Hazard Statement:

Harmful if swallowed.  
Causes severe skin burns and eye damage.  
May cause respiratory irritation.  
Very toxic to aquatic life.

#### Precautionary Statement

##### Prevention:

Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling. Avoid release to the environment.

##### Response:

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor if you feel unwell.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Collect spillage.

**Storage:**

Store locked up. Store in a well-ventilated place. Keep container tightly closed.

**Disposal:**

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards**

Lachrymator.

**3: Composition/information on ingredients**

**Mixtures**

Chemical Identity	CAS number	Content in percent (%)
Ammonium Hydroxide	1336-21-6	18-72%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**4: First aid measures**

**General information:** Get medical advice/attention if you feel unwell. If medical advice is needed, have product container or label at hand.

**Ingestion:** Call a physician or poison control center immediately. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit does not enter the lungs.

**Inhalation:** Move to fresh air. Call a physician or poison control center immediately. Apply artificial respiration if victim is not breathing. If breathing is difficult, give oxygen.

**Skin Contact:** Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

**Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.

**Most important symptoms/effects, acute and delayed**

Symptoms: Causes severe skin burns and eye damage.

Hazards: Corrosive.

**Indication of immediate medical attention and special treatment needed**

Treatment: Treat symptomatically. Symptoms may be delayed.

**5: Firefighting measures**

**General Fire Hazards:**

In case of fire and/or explosion do not breathe fumes.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:**

Water spray, fog, CO<sub>2</sub>, dry chemical, or regular foam.

**Unsuitable extinguishing media:**

None known.

**Specific hazards arising from the chemical:**

Fire may produce irritating, corrosive and/or toxic gases.

**Special protective equipment and precautions for firefighters****Special firefighting procedures:**

Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

**Special protective equipment for fire-fighters:**

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6: Accidental release measures****Personal precautions, protective equipment and emergency procedures:**

Keep unauthorized personnel away. Keep upwind. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the SDS for Personal Protective Equipment.

**Methods and material for containment and cleaning up:**

Neutralize with lime or soda ash. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

**Notification Procedures:**

Inform authorities if large amounts are involved.

**Environmental Precautions:**

Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Avoid discharge into drains, water courses or onto the ground.

**7: Handling and storage****Precautions for safe handling:**

Do not breathe mist or vapor. Do not get in eyes, on skin, on clothing. Do not taste or swallow. Use only with adequate ventilation. Wash hands thoroughly after handling. See Section 8 of the SDS for Personal Protective Equipment.

**Conditions for safe storage, including any incompatibilities:**

Keep container tightly closed. Store in a well-ventilated place. Do not store in metal containers.

**8: Exposure controls/personal protection****Control parameters****Exposure controls****Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment****Eye/face protection**

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards.

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

## Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type or respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards.

## 9: Physical and chemical properties

### Appearance

Physical state	: liquid
Form	: liquid
Color	: Colourless
Odor	: Ammonia odor
Odor threshold	: No data available.
pH	: 13.8
Melting point/freezing point	: -74.4 °C
Initial boiling point and boiling range	: 27 °C
Flash Point	: not applicable
Evaporation rate	: No data available.
Flammability (solid, gas)	: No data available.

### Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%)	: No data available.
Flammability limit - lower (%)	: No data available.
Explosive limit - upper (%)	: No data available.
Explosive limit - lower (%)	: No data available.
Vapor pressure	: 288 kPa
Vapor density	: No data available.
Relative density	: 0.90 (20 °C)
Solubility(ies)	
Solubility in water	: Completely Soluble
Solubility (other)	: No data available.
Partition coefficient (n-octanol/water)	: No data available.
Auto-ignition temperature	: No data available.
Decomposition temperature	: No data available.
Viscosity	: No data available.

## 10: Stability and reactivity

**Reactivity:** No dangerous reaction known under conditions of normal use.

**Chemical Stability:** Material is stable under normal conditions.

**Possibility of hazardous reactions:** Hazardous polymerization does not occur.

**Conditions to avoid:** Excessive heat.

**Incompatible Materials:** Strong oxidizing agents. Acids. Metals. Halogens. Water. Nitromethane.

**Hazardous Decomposition Products:** Nitrogen Oxides ammonia

## 11: Toxicological information

### Information on likely routes of exposure

**Ingestion:** Harmful if swallowed. May cause burns of the gastrointestinal tract if swallowed.

**Inhalation:** Severely irritating to respiratory system.  
**Skin Contact:** Causes severe skin burns.  
**Eye contact:** Causes serious eye damage.

**Information on toxicological effects**

**Acute toxicity (list all possible routes of exposure)**

**Oral Product:** LD 50 (Rat): 350 mg/kg

**Dermal Product:** No data available.

**Inhalation Product:** No data available.

**Repeated dose toxicity Product:** No data available.

**Skin Corrosion/Irritation Product:** Causes severe skin burns.

**Serious Eye Damage/Eye Irritation Product:** Causes serious eye damage.

**Respiratory or Skin Sensitization Product:** Not a skin sensitizer.

**Carcinogenicity Product:** This substance has no evidence of carcinogenic properties. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: No carcinogenic components identified

**Germ Cell Mutagenicity In vitro Product:** No mutagenic components identified

**In vivo Product:** No mutagenic components identified

**Reproductive toxicity Product:** No components toxic to reproduction

**Specific Target Organ Toxicity - Single Exposure Product:** Respiratory tract irritation.

**Specific Target Organ Toxicity - Repeated Exposure Product:** None known.

**Aspiration Hazard Product:** Not classified

**Other effects:** None known

**12: Ecological information**

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish Product:** LC 50 (Western mosquitofish (*Gambusia affinis*), 96 h): 15 mg/l

**Aquatic Invertebrates**

**Product:** LC 50 (Water flea (*Daphnia magna*), 48 h): 0.66 mg/l

**Chronic hazards to the aquatic environment:**

**Fish Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Toxicity to Aquatic Plants****Product:** No data available.**Persistence and Degradability****Biodegradation Product:** Expected to be readily biodegradable.**BOD/COD Ratio Product:** No data available.**Bioaccumulative Potential****Bioconcentration Factor (BCF)****Product:** No data available on bioaccumulation.**Partition Coefficient n-octanol / water (log Kow)****Product:** No data available.**Mobility in Soil:** The product is water soluble and may spread in water systems.**Other Adverse Effects:** Very toxic to aquatic life.**13: Disposal considerations****Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local laws.**Contaminated Packaging:** Since emptied containers retain product residue, follow label warnings even after container is emptied.**14: Transport Information Table**

		<b>ADR/RID – European packaging certification</b>	<b>IMDG International Maritime Dangerous Goods Code</b>	<b>IATA – DGR International Air Travel Association – Dangerous Goods Regulations</b>
<b>14.1</b>	<b>UN Number</b>	2672	2672	2672
<b>14.2</b>	<b>UN Proper Shipping name</b>	AMMONIA SOLUTION	AMMONIA SOLUTION	Ammonia solution
<b>14.3</b>	<b>Transport Hazard Class</b>	8	8	8
<b>14.4</b>	<b>Packaging group</b>	III	III	III
<b>14.5</b>	<b>Environmental Hazards</b>	Yes	Yes	No
<b>14.6</b>	<b>Special precautions for user</b>	none		
<b>14.7</b>	<b>Incompatible materials</b>	Copper , iron, Zinc		
	<b>Hazchem Code</b>	2X		

**15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulatory information**

HSNO Group Standard Approval: HSR001526 - Laboratory Chemicals and Reagent Kits Group Standard 2006

Tracking Required: not required

Approved Handler Cert.: not required

## 16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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