

# Chem Alert Report

Product Name **AMMONIA SOLUTION**

## Ingredient

AMMONIUM HYDROXIDE  
ADDITIVES

## Conc.

10 - 35%  
>60%

## CAS No.

1336-21-6  
Not Available

### CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC CRITERIA

<b>Shipping</b>	AMMONIA SOLUTION, relative density between 0.880 and 0.957 at 15 C in water, with more than 10 % but not more than 35 % ammonia		
<b>Synonyms</b>	AMMONIA - AQUEOUS SOLUTIONS (10%-35%), AMMONIA SOLUTION 28 %, AMMONIUM HYDROXIDE, AR 00000043 - PRODUCT CODE, M&B 00002992 - MANUFACTURER'S CODE, RDEH 06030000 - MANUFACTURER'		
<b>Appearance</b>	COLOURLESS LIQUID		
<b>Odour</b>	STRONG IRRITATING ODOUR		
<b>Use(s)</b>	CATALYST, PRESERVATIVE, DYEING, MANUFACTURE OF CHEMICALS, NEUTRALISING AGENT, FERTILISER		
<b>Supplier</b>	FRONINE LABORATORY SUPPLIES Ph: 02 9627 3600 Emerg. Ph: 13 11 26		
<b>Stock No.</b>	441.		
<b>Poison Sched</b>	6	<b>Hazchem 2R</b>	<b>UN No.</b> 2672
<b>Pkg Group</b>	III	<b>EPG</b> 8A1	<b>D.G Class</b> 8 <b>Sub/Tert Risk</b> None Allocated

## HEALTH HAZARDS

<b>Health Hazard Summary</b>	Highly corrosive - severe irritant. This product has the potential to cause acute and chronic health effects. Use safe work practices to avoid eye or skin contact and vapour-mist generation. Upon dilution the potential for corrosive effects-possible tissue damage is reduced. Ammonia gas evolved from solution is a strong eye and upper respiratory tract irritant, avoid exposure.
<b>Eye</b>	Highly corrosive - severe irritant. Contact may result in pain, lacrimation, redness, conjunctivitis, corneal burns and ulceration with possible permanent damage.
<b>Inhalation</b>	Corrosive. Over exposure may result in mucous membrane irritation of nose and throat, coughing and bronchitis. At high levels; ulceration of the respiratory tract, lung damage, chemical pneumonitis and pulmonary oedema.
<b>Skin</b>	Highly corrosive. Contact may result in severe irritation, ulceration and burns with dermatitis. Prolonged contact may result in severe, slow healing burns.
<b>Ingestion</b>	Highly corrosive. Ingestion may result in burns to the mouth and throat, nausea, vomiting and abdominal pain. Large doses may result in ulceration, unconsciousness, convulsions and death.

## PRECAUTIONS

<b>Flammability</b>	Non flammable. May evolve toxic gases when heated to decomposition. Contact with some metals (eg. aluminium), may liberate potentially flammable - explosive hydrogen gas.
<b>Reactivity</b>	Incompatible with oxidising agents (eg. peroxides), acids (eg. sulfuric acid), active metals (eg. aluminium, potassium, magnesium), and heat and ignition sources.
<b>Ventilation</b>	Do not inhale vapours. Use in well ventilated areas. In poorly ventilated areas, mechanical extraction ventilation is recommended.

## PERSONAL PROTECTIVE EQUIPMENT

**PPE** Wear a PVC apron, coveralls, a faceshield, PVC boots and rubber gloves. Where an inhalation risk exists, wear a Type K (Ammonia) Respirator. If spraying, with prolonged use, or if in confined areas, wear an Air-line respirator.



Colour  
Rating  
**RED**

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## FIRST AID

- Eye** Hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre, or for at least 15 minutes.
- Inhalation** Leave area of exposure. If symptoms are evident or develop, seek urgent medical attention. If assisting a victim avoid becoming a casualty, wear a Type K (Ammonia) respirator (or an Air-line respirator in poorly ventilated areas). If victim is not breathing, apply artificial respiration and seek urgent medical attention.
- Skin** Remove contaminated clothing and gently flush affected areas with water. Seek immediate medical attention. Launder clothing before reuse.
- Ingestion** For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor. If swallowed, do not induce vomiting.

## SAFE HANDLING

- Storage** Store in cool, dry, well ventilated area, removed from oxidising agents (eg. hypochlorites), acids (eg sulfuric acid), heat sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should have appropriate ventilation systems.
- Waste Disposal** For small amounts absorb with sand, vermiculite or similar and dispose of to an approved landfill site. Contact the manufacturer for additional information if larger amounts are involved. Prevent contamination of drains and waterways as aquatic life may be threatened and environmental damage may result.
- Transport** Class 8 Corrosive. Do not transport with chemicals of class; 1 (Explosives), 4.3 (Dangerous When Wet), 5.1 (Oxidising agents), 5.2 (Organic peroxides), 6 (Toxics - where the Toxic is a cyanide and the Corrosive is an acid), 7 (Radioactives), 8 (where products are acid/alkali) and foodstuffs.

## EMERGENCY

- Spillage** If spilt (bulk), contact emergency personal if appropriate. Wear splash-proof goggles, PVC/rubber gloves, coveralls and boots. Where an inhalation risk exists, wear a Type K (Ammonia) respirator. Prevent spill entering drains or waterways. Absorb spill with sand or similar and place in sealable containers for disposal. Potentially toxic to aquatic life. Caution: slippery when wet.
- Environment** ATMOSPHERE: Ammonia is readily returned to the soil by washout from rain. SOIL: Ammonia is strongly adsorbed to the soil. WATER: Rapidly converted to nitrates resulting in an increase in the pH of water and an oxygen demand (BOD) several days after the introduction of ammonia. Highly toxic to fish - levels of 1 ppm in water may be fatal to some species.
- Fire and Explosion** Non flammable. If product is present in a fire, toxic gases may be evolved. Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.
- Extinguishing** Non flammable. Prevent contamination of drains or waterways, absorb runoff with sand or similar.

## PHYSICAL AND CHEMICAL PROPERTIES

**Flammability:** NON FLAMMABLE  
**Boiling Point:** NOT AVAILABLE  
**Exposure Standard:** 25 ppm Ammonia  
**pH:** 11.6 (1 N solution)  
**Specific Gravity:** 0.9 (Approximately)  
**Vapour Pressure:** 6.9 -10.5 psi @ 20 C  
**Lower Explosion Limit:** NOT RELEVANT

**Flash Point:** NOT RELEVANT  
**Melting Point:** NOT AVAILABLE  
**Evaporation Rate:** NOT AVAILABLE  
**% Volatiles:** 100 %  
**Solubility (water):** SOLUBLE  
**Upper Explosion Limit:** NOT RELEVANT  
**Vapour Density:** 0.6 (air =1)