

# Chem Alert Report

Product Name **AMMONIA (ANHYDROUS)**

**Ingredient**  
AMMONIA

**Conc.** 100%  
**CAS No.** 7664-41-7

**Shipping** **CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC CRITERIA**  
AMMONIA, ANHYDROUS

**Synonyms** AMMONIA GAS, ANHYDROUS AMMONIA, WESFARMERS CSBP AMMONIA (ANHYDROUS)).

**Appearance** COLOURLESS GAS OR LIQUID

**Odour** STRONG CHARACTERISTIC ODOUR

**Use(s)** PROCESS REAGENT, SYNTHETIC FIBRES, SYNTHETIC RESINS, FERTILISER MANUFACTURE, EXPLOSIVE M

**Supplier** FRONINE LABORATORY SUPPLIES Ph: 02 9627 3600 Emerg. Ph: 13 11 26

**Stock No.** 491.

**Poison Sched** 6

**Hazchem** 2RE

**UN No.** 1005

**D.G Class** 2.3

**Pkg Group** None Allocated

**EPG** 2B3

**Sub/Tert Risk** 8

## HEALTH HAZARDS

**Health Hazard Summary** Highly corrosive - Severe irritant. This product has the potential to cause acute and chronic health effects. Use safe work practices to avoid inhalation and eye or skin contact.

**Eye** Highly corrosive - severe irritant. Contact may result in pain, lacrimation, redness, conjunctivitis, corneal burns and ulceration with possible permanent damage.

**Inhalation** Corrosive. Over exposure may result in mucous membrane irritation of nose and throat, coughing, bronchitis. At high levels; ulceration of the respiratory tract, lung damage, chemical pneumonitis, pulmonary oedema, coma and death. CAUTION: Effects may be delayed.

**Skin** Highly corrosive. Severe irritant, contact may result in ulceration, dermatitis, burns and frost-bite. Prolonged contact may result in severe, slow healing burns.

**Ingestion** Due to product form ingestion is not considered likely. However, ingestion of liquid may result in burns to the mouth and throat, gastrointestinal tract ulceration, nausea, vomiting and unconsciousness.

## PRECAUTIONS

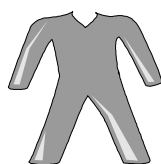
**Flammability** Flammable gas - forms explosive mixtures with air. Lighter than air and will generally disperse, however may concentrate in hollows or sumps. Dissolves exothermically in water. Corrosive to metals evolving flammable hydroge

**Reactivity** Incompatible (explosively in some instances) with oxidising agents (ie. peroxides), acids, (eg. sulfuric acid), active metals (eg. aluminium, potassium, magnesium) and heat sources.

**Ventilation** Do not inhale vapours. Use in well ventilated areas. In poorly ventilated areas, mechanical explosion proof extraction ventilation is recommended.

## PERSONAL PROTECTIVE EQUIPMENT

**PPE** Wear coveralls, safety glasses, a Type K (Ammonia) Respirator and leather or insulated gloves. Where an inhalation risk exists, wear Self Contained Breathing Apparatus (SCBA) or an Air-line respirator. At high vapour levels, wear Self Contained Breathing Apparatus (SCBA) or an Air-line respirator. Only experienced and trained person should use this product.



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** If stored in cylinders, store securely, in upright, cool (<45 C), well ventilated area, removed from heat and ignition sources, oxidising agents, acids, active metals and foods. Ensure cylinders are labelled, protected from physical damage and valves closed when not in use. Separate used cylinders from full and use older stock first.
- Waste Disposal** If stored in cylinders, return to manufacturer or supplier for recycling. Do not puncture or incinerate. Dispose of to an approved landfill site. Contact the manufacturer for additional information.
- Transport** Class 2.3 Toxic Gases. Do not transport with chemicals of class; 1 (Explosives), 3 (Flammable liquids), 4.2 (Spontaneously combustibles), 5.1 (Oxidising agents), 5.2 (Organic peroxides) and foodstuffs.

## EMERGENCY

- Spillage** GAS CYLINDERS: If the cylinder is leaking, wearing appropriate PPE move it to a well ventilated area and allow to discharge. Eliminate all potential ignition sources. Inform supplier of leak. Do not attempt to repair leaking valve. Clear area of personnel in direction of gas movement.
- Environment** When ammonia appears in water under the normal conditions (aerobic), it is rapidly converted to nitrate by nitrification; the principal water contaminant normally being nitrate. The pH in water is increased by the presence of ammonia ion, in the form of hydroxide ions. Ammonia is strongly adsorbed on soil, and on sediment particles and colloids in water.
- Fire and Explosion** Flammable gas - potentially explosive, with potential for containers (cans, cylinders) becoming airborne. Evacuate the area and contact emergency services. Do not approach containers. Use waterfog to cool intact containers and nearby storage areas.
- Extinguishing** Dry agent, carbon dioxide or foam. Prevent contamination of drains or waterways. Absorb runoff with sand or similar.

## PHYSICAL AND CHEMICAL PROPERTIES

<b>Flammability:</b> FLAMMABLE	<b>Flash Point:</b> NOT AVAILABLE
<b>Boiling Point:</b> - 33.5 C	<b>Melting Point:</b> NOT AVAILABLE
<b>Exposure Standard:</b> 25 ppm Ammonia	<b>Evaporation Rate:</b> NOT AVAILABLE
<b>pH:</b> NOT AVAILABLE	<b>% Volatiles:</b> NOT AVAILABLE
<b>Specific Gravity:</b> 0.683	<b>Solubility (water):</b> 899 g/L
<b>Vapour Pressure:</b> 888 kPa @ 21 C	<b>Upper Explosion Limit:</b> 25 %
<b>Lower Explosion Limit:</b> 16 %	<b>Autoignition Temperature:</b> 651 C
<b>Vapour Density:</b> 0.607 (Air = 1)	

RED

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