

## Ammonium Nitrate Solution (ANSol)

Australia

### Description

Hot and concentrated solution of ammonium nitrate.

### Application

Ammonium Nitrate Solution (ANSol) is primarily used in the manufacture of oxidizer solutions to make precursors for blasting agents.

It is also used as a raw material for the manufacture of medical gases (nitrous oxide).

### Key Benefits

- Pure grade source of ammonium nitrate containing no additives.
- Easily moved in bulk truck shipments.
- Allows transport of raw material liquid oxidizer substance to site of further processing.

### Safety Features

Ammonium Nitrate Solution is a strong oxidizing substance, which will react with organic materials, reducing agents and metal powders. It may support combustion and increase the intensity of a fire.

Under excessive heating to decomposition, Ammonium Nitrate Solution produces nitrous oxide and white ammonium nitrate mist and/or brown fumes. Brown fumes indicate the presence of toxic oxides of nitrogen.

Ammonium Nitrate Solution may be toxic to aquatic organisms and animals if it enters water courses.

Hot and concentrated Ammonium Nitrate Solution poses a risk in handling operations regarding thermal and chemical burns. Complications can arise if ANSol enters the blood stream from severe burns. Use of correct personal protective equipment and procedures should be adhered to in handling this product.

Further details in safety aspects are contained in the product Safety Data Sheet

### Packaging

Available only in bulk loads. Shipments are to be made in an insulated and approved bulk road tanker or ISO-tainer.

### Technical Properties

Physical Form	Hot, clear liquid
AN Concentration (% w/w)	87.5-89.0
Solution pH (10% solution at 20°C)	5.0-7.0
Turbidity (as 50% solution) (NTU)	5 max
Typical Dispatch Temperature (°C)	105 - 125
Total organic carbon (%w/w)	< 0.2%

### Storage and Handling

#### Product Classification

Authorised Name:	Ammonium Nitrate Solution
Proper Shipping Name:	Ammonium Nitrate, Liquid
UN No:	2426
Class Code :	5.1 (oxidizing substance)
Packaging Group:	III
Hazchem Code :	1Y

This product is classified as a Hazardous Chemical and as a Dangerous Good. All regulations pertaining to the handling and use of such oxidizing substances apply.

### Storage and Transport

Unless diluted with additional water, Ammonium Nitrate Solution of this concentration must be shipped and/or stored at not less than 100° C. Failure to do so can result in fudging (crystallization) at the container or tank extremities causing potential blockages when discharging. This increases risks to personnel to manage this situation Ammonium Nitrate Solution should be stored away from sources of heat or ignition.

Ammonium Nitrate Solution storage is required to meet certain minimum standards and in most cases requires licensing as per local regulations. Reference should be made to the appropriate standards/regulations of the country or local jurisdiction for the storage and handling of oxidizing substances. Ammonium Nitrate Solution is required to be transported in strict accordance with the UN publication

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"Recommendation on the Transport of Dangerous Goods - Model Regulations" and the "International Maritime Dangerous Goods Code".

In Australia transport must also be in accordance with the current edition of the "Australian Code for the Transport of Dangerous Goods by Road and Rail." Special requirements may be required for movement across wharves in some jurisdictions and countries.

Specific local regulations may apply relating to this product including licensing of individuals and organisations involved in the Chain of Responsibility for Ammonium Nitrate.

Further information is available on the Safety Data Sheet for Ammonium Nitrate Liquid.

### Disposal

Disposal of Ammonium Nitrate Solution can be hazardous. Methods for safe disposal may vary depending on the user's situation. Please contact a local Orica Representative for information on safe practices.

### Disclaimer

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Explosives based on ammonium nitrate may react with sulphide materials in the ground and create potentially hazardous situations. Orica accepts no responsibility for any loss or liability arising from use of the product in ground containing sulphide or other reactive material.

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### Emergency Telephone Numbers

Within Australia: 1800 033 111

Outside Australia: 61 3 9663 2130