

# Ammonia

## NH<sub>3</sub> 33.5%

Ammonia is a compound containing the molecules Nitrogen and Hydrogen. It is used as a source of Nitrogen in fertilisers and in chemical manufacture.



### Properties

Ammonia is a colourless gas at ambient temperature and pressure. It has a very strong odour and is highly alkaline. It has a high latent heat of vaporisation which makes it an effective refrigerant. CF Fertilisers manufactures Liquefied Anhydrous Ammonia and supplies it in both premium and standard grades. In addition, a solution of Ammonia gas in demineralised water (Ammonia solution) is offered at strengths of 33.5% or 24.5%.



Responsible  
Care

### Uses

Most of CF Ammonia is used to manufacture Ammonium Nitrate based Fertilisers. Ammonia is also used extensively in the chemical industry to produce other raw materials (intermediates). Some typical uses are in the manufacture of pharmaceuticals, dyes, plastics, man-made fibres and explosives. It can also be used for heat treatment of metals and is gaining popularity as a refrigerant.

Following the introduction of new environmental legislation, it is now being used to treat NO<sub>x</sub> emissions (Oxides of Nitrogen) from power stations, waste incinerators and other processes. It is used as a dosing agent to convert the oxides to harmless Nitrogen and water.

### Management Systems

CF manufactures and supplies Ammonia using systems and processes accredited to the following standards:- ISO 9001:2008; ISO 14001:2004 and OHSAS 18001:2007. Making it a consistent and reliable supplier of high quality product. It is also a member of the Chemical Industry Association and subscribes to its Responsible Care Scheme.



# CF Fertilisers UK Limited

## Standard Sales Specification

CF Fertilisers UK Limited

Ref: CF Fertilisers/AS/33-34/Sales

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|                              |  |
|------------------------------|--|
| <b>Product:</b>              | Ammonia Solution, Aqua Ammonia,<br>Ammonium Hydroxide Ammonia Liquor |
| <b>Formula:</b>              | NH <sub>4</sub> OH   |
| <b>Specification number:</b> | CF Fertilisers/AS/33–34/Sales  |
| <b>Product source:</b>       | Billingham, UK   |
| <b>Strength:</b>             | 33.5%  |

## Specification details

| Parameter                                  | Units   | Value         | Test   |
|--|---------|---------------|--------|
| Ammonia Strength                           | % w/w   | 33.0 – 34.0   | 2/4/1  |
| Specific Gravity (15.5°/15.5°C)            | Typical | 0.887 – 0.884 | –      |
| Arsenic, as As <sub>2</sub> O <sub>3</sub> | ppm w/w | Max 0.1       | 2/4/2  |
| Carbonate, as CO <sub>3</sub>              | ppm w/w | Max 20.0      | 2/4/3  |
| Chloride, as Cl                            | ppm w/w | Max 2.0       | 2/4/4  |
| Copper, as Cu                              | ppm w/w | Max 1.0       | 2/4/6  |
| Iron, as Fe                                | ppm w/w | Max 1.0       | 2/4/6  |
| Lead, as Pb                                | ppm w/w | Max 1.0       | 2/4/6  |
| Phosphate, as PO <sub>4</sub>              | ppm w/w | Max 2.0       | 2/4/4  |
| Silicate, as SiO <sub>2</sub>              | ppm w/w | Max 1.0       | 2/4/11 |
| Sodium, as Na                              | ppm w/w | Max 1.0       | 2/4/6  |
| Sulphate, as SO <sub>4</sub>               | ppm w/w | Max 2.0       | 2/4/4  |
| Colour                                     | HU      | Max 20.0      | 2/4/5  |
| Turbidity                                  | NTU     | Max 3.0       | 2/4/14 |
| Residue on ignition                        | ppm w/w | Max 10.0      | 2/4/10 |
| Residue on evaporation                     | ppm w/w | Max 25.0      | 2/4/9  |

For more information on purchasing any of our products or to access our specialist advice please visit: [www.cffertilisers.co.uk/industrial](http://www.cffertilisers.co.uk/industrial), call us on: **01642 546800** or email: [info@cffertilisers.co.uk](mailto:info@cffertilisers.co.uk)

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This specification has been approved by the CF Fertilisers UK Limited, Technical Services Manager

