

Section 1 – GENERAL	
Product Name:	Ammonia solution, 25%, industrial
Description:	Ammonia (ammonium hydroxide, NH <sub>4</sub> OH) is a clear or colourless solution with a pungent suffocating odour.
Properties:	Density at 20 °C: 0.90g/cm³Boiling point at 101.3 kPa:36°CFreezing point:- 63°CVapour pressure at 55 °C:ca. 177kPa
Toxicity:	<ul> <li>The material is moderately toxic with a rating of 3 in the "Clinical Toxicology of Commercial Products".</li> <li>The probable lethal dose (to humans) is 0, 5-5g/kg of body mass.</li> <li>TWA OEL-RL: 17mg/m<sup>3</sup> / 25ppm as NH<sub>3</sub> and ST OEL-RL: 24mg/m<sup>3</sup> / 35 ppm as NH<sub>3</sub> (According to "Occupational Health and Safety Act", Act 85 of 1993, as amended.)</li> </ul>
Hazards:	The material is corrosive to the skin, is extremely irritating to the eyes and its vapour is highly suffocating. Ammonia gas is flammable and forms explosive mixtures at concentrations of 16 to 25 $\%$ (v/v) in air.
Special Precautions:	Avoid ingestion, inhalation of the vapour, skin and eye contact. Direct contact of the vapour with flames or high heat must be avoided. Wear protective clothing when handling the material and ensure adequate ventilation
Statutory Aspects:	The material is labelled as, corrosive substance, UN No. 2672, Class 8, Group III, according to the SANS 10228 and OHS Act No. 85 of 1993.



## **PRODUCT SPECIFICATION: SPE.0026**

Section 2 – SPECIFICATION	
Appearance	The material is a clear or colourless to slightly yellow liquid.
Density (20°C)	Not more than 0.907g/cm <sup>3</sup>
Strength	Not more than 25.0% as $NH_3$

### **Section 3 – TESTING**

The material is sampled and tested according to the most recent editions of the Sampling Procedures and Analytical Schedule respectively. The sample is tested to the most recent edition of the method specified.

#### PARAMETER

METHOD NO.

3.1	Appearance
3.2	Strength
3.3	Density

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This material is processed and tested at Umbogintwini Factory

# Section 4 – PACKING

This material is packed in bulk road containers

#### **Section 5 – DOCUMENTATION**

This specification is based on: Information from Umbogintwini Factory.

# Section 6 – USES

As an industrial chemical

Section 7 – REASON FOR REVISION October 2013 – New template