MATERIAL SAFETY DATA SHEET (MSDS)

AMMONIA

(Please ensure that this MSDS is received by the appropriate person)

DATE: September 2015 Version 3

Ref. No.: MS025

1 PRODUCT AND COMPANY IDENTIFICATION

Product Name Ammonia

Chemical Formula NH_3

Trade name Ammonia

Colour coding Silver body with a Red(A.11) circle below the valve, and a yellow band immediately below the red circle

Valve CGA240-3/8 inch – 18 NGT right hand female

Company Identification
African Oxygen Limited
23 Webber Street
Johannesburg, 2001
Tel. No: (011) 490-0400
Fax No: (011) 490-0506

EMERGENCY NUMBER 0860111185 or (011) 873 4382
(24 hours)

2 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Ammonia
Chemical family	Corrosive, caustic, reactive gas
Synonyms	Anhydrous ammonia, R717
CAS No.	7664-41-7
UN No.	1005
ERG No.	125
Hazchem	Warning Corrosive toxic gas

3 HAZARDS IDENTIFICATION

Main Hazards Irritating or corrosive to exposed tissues. Inhalation of vapours may result in pulmonary oedema and chemical pneumonitis. Contact with liquid product may cause frostbite or freeze burns, in exposed tissues. All cylinders are portable gas containers and must be regarded as pressure vessels at all times.

Adverse Health Effects. Inhalation of high concentrations produces violent coughing due to the local action on the respiratory tract. If rapid escape is not possible, severe lung irritation, pulmonary oedema and death can result. Lower concentrations cause eye irritation, laryngitis and bronchitis.

Biological Hazards. Because of its alkaline properties, long-term exposure to flora can cause damage. Aquatic fauna can also be affected should the pH of their environment change due to long-term exposure to high concentrations of ammonia.

Vapour Inhalation. Ammonia acts principally on the upper respiratory tract, where it exerts an alkaline, caustic action. It produces respiratory reflexes such as coughing and arrest of respiration. It affects the conjunctiva and cornea immediately. Inhalation causes acute inflammation of the respiratory organs, coughing, oedema of the lungs, chronic bronchial catarrh, secretion of saliva and retention of urine.

Eye Contact Exposure to high gas concentrations may cause temporary blindness and severe eye damage. Direct contact of the eyes with liquid anhydrous ammonia will produce serious eye burns.

Skin Contact Liquid anhydrous ammonia produces skin burns on contact.

Ingestion Swallowing of the liquid results in severe corrosive action of the mouth, throat, and stomach.

Labelling Elements:

Hazard Pictograms

Signal Word: Danger

Hazard Statements:

H221: Flammable gas

H331: Toxic if inhaled

H314: Causes severe skin burns and eye damage

H400: Very toxic to aquatic life

Precautionary Statements:

(SEE FIRST AID MEASURES SECTION FOR TREATMENTS)

P260: Do not breathe gas/vapours

P262: Do not get in eyes, on skin, or on clothing

P264: Wash hands thoroughly after handling

P271: Use only outdoors or in a well ventilated area

P273: Avoid release to the environment

P391: Collect spillage

P284: Wear respiratory protection

P304+P340: IF INHALED: remove to fresh air and keep at rest in a position comfortable for breathing

P310: Immediately call a POISON CENTRE or doctor/physician

P320: Specific treatment is urgent (see first aid measures section)

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do not induce vomiting

P303+P361+P353: IF ON SKIN (or hair): Immediately remove or take off all contaminated clothing. Immediately rinse skin with water/shower

P363: Wash contaminated clothing before re-use.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

P377: Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

P401: Store in accordance with national regulations

P403+233: Store in a well ventilated place and keep container tightly closed

P405: Store locked up

P501: Do not dispose contents/container to storm water drains, treat as hazardous waste.