# AMMONIA CAS # 7664417 HAZARDOUS CHEMICAL OF CONCERN

A Special Carcinogen E Dermal Hazard I Neurotoxin

B Human Terato\Repro Haz F Corrosive J Suspect Carcinogen

C Highly Toxic G Eye Damage K Suspect Terato\Repro Haz

D Inhalation Hazard H STEL L Sensitizers

HAZARD INDEX . . C D . . G H . . . .

NFPA HAZARD CODES (H,F,R,O) 3 1 0

EXTREMELY TOXIC - DESIGNATED AREA MAY BE REQUIRED

ACUTE TOXICTY RISK INDEX 5 - LD50 mg/Kg

INHALATION HAZARD INHALATION RISK INDEX <1 - LC50 44940.0

ROUTE OF EXPOSURE

skin Contact: Causes burns.

skin Absorption: May be harmful if absorbed through the skin.

Eye Contact: Causes burns.

Inhalation: Can cause rapid suffocation. Toxic if inhaled.

Material is extremely destructive to the tissue of the mucous

membranes and upper respiratory tract.

Ingestion: May be harmful if swallowed.

TARGET ORGAN(S) OR SYSTEM(S)

Lungs. Central nervous system. Liver. Kidneys.

SIGNS AND SYMPTOMS OF EXPOSURE

Material is extremely destructive to tissue of the mucous

membranes and upper respiratory tract, eyes, and skin.

Inhalation may result in spasm, inflammation and edema of the

larynxand bronchi, chemical pneumonitis, and pulmonary edema.

Symptoms of exposure may include burning sensation, coughing,

wheezing, laryngitis, shortness of breath, headache, nausea, and

vomiting. To the best of our knowledge, the chemical, physical,

and toxicological properties have not been thoroughly

investigated.

PHYSICAL CHARACTERISTICS

PHYSICAL STATE: Gas

Ccombustible

VAPOR PRESSURE 6196.1 mm Hg @ 20 °C

FLASH POINT 269.6 °F

SEGREGATION: SHELF # 3

STORAGE GROUP(S):

i - CorrosiveorNon-Toxic Gas

l - Flammable/Combustible Solvent

WASTE CHARACTERISTIC HAZARD: TOXIC

INCOMPATIBILITIES:Oxidizing agents, Galvanized iron, Zinc, Copper,

Silver/silver oxides, Cadmium/cadmium oxides, Alcohols, Acids, Halogens,

Aldehydes.

FIRE EXTINGUISHER: Use water spray or fog nozzle to keep cylinder cool. Move

cylinder away from fire if there is no risk.

TOXIC EMISSIONS WHEN BURNED: Ammonia

REACTIVE PROPERTIES

HANDLING: Do not breathe gas. Do not get in eyes, on skin, on clothing. Avoid

prolonged or repeated exposure. STORAGE: Keep tightly closed. Use with

equipment rated for cylinder pressure, and of compatible materials of

construction. Close valve when not in use and when empty. Make sure

cylinder is properly secured when in use or stored Cylinder temperature

should not exceed 125░F (52░C)\. SPECIAL REQUIREMENTS Contents under

pressure.

GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION

EU DIRECTIVES CLASSIFICATION

Symbol of Danger: T N

Indication of Danger: Toxic. Dangerous for the environment.

R: 10 23 34 50

Risk Statements: Flammable. Toxic by inhalation. Causes burns.

Very toxic to aquatic organisms.

S: 9 16 26 36/37/39 45 61

Safety Statements: Keep container in a well-ventilated place.

Keep away from sources of ignition - no smoking. In case of

contact with eyes, rinse immediately with plenty of water and

seek medical advice. Wear suitable protective clothing, gloves,

and eye/face protection. In case of accident or if you feel

unwell, seek medical advice immediately (show the label where

possible). Avoid release to the environment. Refer to special

instructions/safety data sheets.

OSHA REGULATORY LIMITS

OSHA Short Term Exposure Limit 35 ppm

ACGIH RECOMMENDED LIMITS

ACGIH Threshold Limit Value 25 ppm

ACGIH Short Term Exposure Limit 35 ppm

Immediately Dangerous to Life and Health 300 ppm

US DEPARTMENT OF ENERGY TEEL'S

DOE Occupational Exposure Limit 25 ppm

DOE Short Term Exposure Limit 30 ppm

DOE Ceiling Limit 160 ppm

The information presented in the OPMSDS is intended as a synopsis of relative hazard characteristics for this chemical, for application within the UMass-Boston Chem/XL Laboratory Program. This information is derived from a wide range of sources documented in that program. While these sources are considered credible, the user is cautioned that the university cannot guarantee the accuracy nor accept responsibility for damages which may arise from errors, omissions, or the use of this information in any context other than intended. The user is strongly encouraged to seek additional information whenever feasible.