

## AQUA AMMONIA PERSONAL SAFETY AND HANDLING

### EMPLOYEE SAFETY

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Each employee that will handle ammonia should be well trained in:

- Potential hazards
- Safety Equipment
- Safe handling procedures
- First aid
- Emergency procedures

Safety equipment is no substitute for careful handling. Since accidents are unpredictable, safety equipment should be readily available, regularly inspected and carefully maintained to insure operable condition. A minimum of the following protective and safety equipment is required at each storage facility:

- Goggles and/or full face shield per handler
- Chemical resistant gloves, boots, coat and apron per handler
- Quick acting shower and fountain or min. 50 gallons water
- Full face respiratory devices
- First aid kit
- Fire extinguisher

### HEALTH HAZARD

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The liquid and vapor are both strong irritants to the skin, eyes, mucous membranes and respiratory system. Direct exposure can cause severe burns. Inhalation of vapors will cause irritation and, in severe cases, death by asphyxiation.

### FIRST AID

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- **EYE CONTACT** - For direct contact, immediately flush eyes with clean water for at least fifteen minutes. Hold eyelids open to assure complete flushing. Call a physician immediately.
- **SKIN CONTACT** - Immediately flush affected areas with large amounts of water while removing contaminated clothing. If the skin surface is damaged, apply a clean dressing and seek immediate medical attention. Do not apply salves or ointments. If skin surface is not damaged, cleanse affected area thoroughly by washing with mild soap and water. If irritation or redness develops, seek immediate medical attention.
- **INHALATION** - Immediately move victim away from the exposure and into fresh air. If victim is not breathing or if breathing difficulties develop, artificial respiration or oxygen should be administered by qualified personnel. Seek immediate medical attention.
- **INGESTION** - ***DO NOT INDUCE VOMITING.*** Ammonia is a corrosive material which will cause alkaline burns. If the victim has any breathing difficulties, call emergency assistance immediately. If victim is conscious, immediately rinse mouth with water and if possible, diluted vinegar, lemon juice, orange juice or other citric juices.

### FIRE HAZARD

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- Liquid is not combustible.
- Vapor has flammable limits of 16 to 25% in air. This situation is normally not encountered; but, if storage is exposed to high heat, ammonia will volatilize, causing vapor and pressure build-up.
- Water is the most effective fire fighting agent because it quickly absorbs ammonia vapor, thus removing the fire's fuel.
- Proper protective equipment should be worn by anyone fighting the fire.

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