

PRODUCT PROFILE

Anhydrous Ammonia Safety & Handling



EMPLOYEE SAFETY

Any employee that handles anhydrous ammonia should be sufficiently trained in:

- Materials Handling & Storage
- Hazard Communication
- Safety Equipment
- First Aid & Emergency Response
- Respiratory Protection
- Personal Protective Equipment

Safety equipment is not a substitute for careful handling. Since accidents are unpredictable, safety equipment should be readily available, regularly inspected and carefully maintained to ensure operable condition. This list of protective safety equipment is required at each storage facility:

- Goggles/full face shield
- Ammonia resistant gloves, boots, coat, and apron
- Emergency Eyewash (0.4 GPM/15 Minutes) and Safety Shower (20 GPM/15 Minutes)
- Respiratory Protection
- Fire Extinguisher

HEALTH HAZARD

Ammonia liquid and vapor are both strong irritants to the skin, eyes, mucous membranes, and respiratory system. Direct exposure may cause severe burns. Inhalation of as low as 50 ppm will cause irritation. Stronger concentrations may cause more severe irritation. Concentrations above IDLH (300 PPM) may result in elevated respiratory distress, including death by asphyxiation.

FIRST AID

- **EYE CONTACT** - Immediately and cautiously rinse eyes with clean water for several minutes. Hold eyelids open to assure complete flushing. If irritation persists, seek immediate medical attention.
- **SKIN CONTACT** - Immediately flush affected areas with large amounts of water; remove 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, seek emergency assistance immediately.

FIRE HAZARD INFORMATION & TRANSPORTATION CLASSIFICATION

- Liquid is not combustible.
- Gas has flammable limits of 16 - 25% in air. This situation is normally not encountered; however, if storage is exposed to high heat, ammonia will volatilize causing vapor and pressure build-up.
- Proper protective equipment should be worn by anyone fighting a fire.
- Anhydrous ammonia is classified as **NON-FLAMMABLE GAS**. Placarding and product identification on vessels and bill of lading is required. Contact Hill Brothers for additional information.

INSTALLATIONS

Ammonia is stored and piped with iron or steel only. Brass, copper, silver, zinc, bronze, and many other alloys should not be used. Use only trained, experienced personnel for installations or repair of ammonia systems or equipment.

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The information on this Product Profile is based on data obtained by our own research and is considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data, the results to be obtained from the use thereof, or that any such use will not infringe any patent. This information is furnished upon the condition the person receiving it shall make his own tests to determine the suitability thereof for his particular purpose. For latest product specifications, contact our nearest sales office.

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