

aqua ammonia

What is Aqua Ammonia?

Aqua ammonia is a liquid mixture of ammonia gas and water, which has a sharp, irritating odor.

How is Aqua Ammonia used?

Aqua ammonia is used as the nitrogen source for fertilizer and also in the making of specialty fertilizers. Aqua ammonia is used by other industries in the making of refrigerants and home and commercial cleaning products.

What are the potential hazards?

Aqua ammonia is corrosive to copper, silver, aluminum, zinc, and alloys. It reacts with body moisture, so it may burn body tissue - skin, eyes, mouth, throat, lungs, and stomach - on contact, if inhaled or swallowed.

Aqua ammonia is generally tolerable at concentrations up to 25 parts-per-million (ppm), although the smell is unpleasant and sharp. Above this concentration, irritation of the eyes, nose, and throat may begin. Above 400 ppm, skin irritation and coughing occur immediately. The U.S. National Institute for Occupational Safety and Health (NIOSH) has established 300 ppm as the concentration that is immediately dangerous to life and health (IDLH); at this concentration, a person's ability to escape is impaired.

At concentrations between 1000 ppm and 2500 ppm, increasing chest tightness and severe eye, skin, and lung irritation will result. Immediate suffocation may result at concentrations above 2500 ppm. Effects may be more pronounced at lower concentrations in children, the elderly, and persons with impaired lung function.

Is Aqua Ammonia flammable or explosive?

No, aqua ammonia is not flammable or explosive. However, aqua ammonia poses a danger when it is exposed to fire or elevated temperatures as it may decompose, releasing flammable and toxic gases.

What are the Emergency Response procedures?

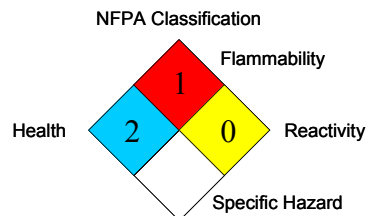
In the event of a spill or accidental discharge, the fire department will attempt to contain the spilled material and prevent the discharge of additional aqua ammonia. If there is a fire, water will be used to extinguish it. Spilled aqua ammonia will be diluted with water and mopped up or absorbed with an inert dry material and placed in appropriate disposal containers. The residue will be neutralized with a dilute solution of acetic acid such as vinegar.

What should you do if you are exposed to Aqua Ammonia?

For eye contact:

- Check for and remove contact lenses. **IMMEDIATELY** flush eyes with running water for at least 30 minutes, keeping the eyelids open. Use warm water if available. Obtain immediate medical attention.

fact sheet



Where can I get more information?

For more information on this product, or other Agrium products, please call Agrium directly at (403) 225-7000.

Information can also be found at the following websites:

• **Agency for Toxic Substances and Disease Registry (ATSDR):**
www.atsdr.cdc.gov

• **Occupational Health and Safety Administration (OSHA):** www.osha.gov

• **Canadian Centre for Occupational Health and Safety:** www.ccohs.ca

Agrium

13131 Lake Fraser Drive S.E.
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(403) 225-7000

www.agrium.com

For skin contact:

- Remove contaminated clothing as quickly as possible. Flush exposed skin with large amounts of water for at least 30 minutes. Use warm water if available. If irritation persists, seek medical attention. Dispose of contaminated clothing in a manner that limits further exposure.

For minor inhalation:

- Using appropriate respiratory protection, remove the affected individual from the area of overexposure. Allow the person to rest in a well-ventilated area. If irritation persists, obtain medical attention.

For severe inhalation:

- Use proper respiratory protection to evacuate affected individuals to a safe area as soon as possible. Loosen tight clothing around the person's neck and waist. If breathing is difficult administer oxygen. If the person is not breathing, perform artificial respiration and obtain immediate medical attention.

For ingestion:

- Do not induce vomiting. Careful removal of the ammonia from the stomach by medical personnel is required. Call a physician or poison control center and seek immediate medical attention. If tolerated, give no more than 1 cup of milk or water to rinse the mouth and throat and dilute the stomach contents. No more than 8 ounces (1 cup) in adults and 4 ounces (1/2 cup) in children are recommended to minimize the risk of vomiting.

What should you do in the event of a spill?

Follow any special instructions given over the radio, T.V., or by someone in authority. If there is a fire or an explosion, stay away from the site. Follow standard, marked emergency routes or directions from police to travel to your destination.

If there has been a release of toxic vapors:

- Go indoors immediately and close all doors, windows, and openings.
- Turn on your radio or television to a local news station. (*Be prepared to wait a few minutes for news.*)
- Follow any special instructions given over the radio or television, or by someone in authority.
- Shut off all air conditioning units, fans, ventilation systems and clothes dryers. In winter, turn your furnace to its lowest setting and close fireplace dampers.
- Evacuate only if advised to do so by local authorities.

You may wish to:

- Place wet towels at the base of doors or breathe through damp towels.
- Bring in pets if they are nearby and easily found.

Unless you are told to do so by authorities:

- **DO NOT** evacuate or travel.
- **DO NOT** bring home children from school, or other family members from work.
- **DO NOT** call 911 or any other authority for information. Keep your telephone line free.

When you have been advised of an **ALL CLEAR**, open your house to let it air out. ■