

SHARON TOWNSHIP FIRE DEPARTMENT

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Anhydrous Ammonia

What is it:

It is a colorless, highly irritating gas with a sharp, suffocating odor. Odor can be noticed at 5-50 parts per million. Irritating effects generally begin at levels between 25-50ppm. The chemical compound NH_3 contain 82.5% nitrogen to 15.7% hydrogen. At -107.9° anhydrous ammonia freezes to form white crystals and will produce and white cloud when released.

Hazards:

- Reacts with water in the skin, eyes, and respiratory airways.
- NH_3 is not a poison and has no cumulative effects on the body. It is corrosive when in contact with human flesh.
- NH_3 is an alkali.
- Inhalation can effect respiratory of patient.
- Contacts should be removed in the area because the ammonia can be trapped behind them.

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Exposure to Eyes:

- Flush with large quantities of water for 15 minutes. Hold the eyelids apart. Continue flushing with water until Ems arrives.

Exposure to Skin and Mucus Membranes:

- Put the injured part of the body under water. Immersion or a shower is acceptable if a large percentage of the body is involved.
- Remove clothing and shoes while in the water.

Inhalation

- Remove yourself or the victim to an uncontaminated area.
- If the exposure has been slight or for a short time, usually no treatment is required.

Emergency Procedures:

- Unintentional release of NH₃ into the atmosphere is an emergency. The seriousness depends on the amount released and the number of persons in the danger zone.
- The danger zone is calculated with software using atmospheric conditions and the amount of product released.
- Anhydrous ammonia gas is considerably lighter than air and will rise in dry air. However, because of ammonia's tremendous affinity for water, it reacts immediately with the humidity in the air and may remain close to the ground.

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- In the event of a leak, it is safest to move uphill and upwind.
- In the event that you cannot evacuate yourself, close all windows and doors. Seal off any cracks in doors and windows with anything that is available. Turn off all heating and cooling equipment in the house.
- Never drive through any unknown clouds of any product while driving.
- If NH₃ is encountered while driving, roll up all windows and turn off all heating and air conditioning.