



# Anhydrous Ammonia Safety

Toolbox Talks are intended to facilitate health and safety discussions. Find more Toolbox Talks on the [Occupational Safety web page](http://www.ehs.iastate.edu/services/occupational/ppe).

## General Information

The main hazard of anhydrous ammonia is that it does not contain water. Due to this it will absorb moisture from any source, including tissue, causing severe burns. These burns can be fatal when they affect the lungs. It is also extremely corrosive to the skin, eyes, and respiratory tract.



## Anhydrous Ammonia Safety Tips

- Ensure all persons who will work with anhydrous ammonia are properly trained and familiar with the equipment and procedures.
- Wear appropriate personal protective equipment, especially during the transfer process:  
(<https://www.ehs.iastate.edu/services/occupational/ppe>)
  - Tight-fitting eye protection (splash-proof ventless goggles).
    - Prescription glasses alone are not suitable protection.
  - A face shield is recommended in addition to goggles.
  - Full facepiece respirator with ammonia cartridges, as needed and only if trained.
  - Rubber gloves with long cuffs that can be rolled to catch drips.
  - Long-sleeved shirt and pants or disposable coveralls (Tyvek).
  - Leather work shoes/boots.
- Always stand upwind when performing connections.
- Ensure that clean water is available. Nurse and applicator tanks should have at least one five-gallon container of clean water for flushing.
- First aid for anhydrous ammonia exposure:
  - Flush the exposed area for a minimum of 15 minutes.
  - Remove contaminated clothing, if not frozen to the skin.
  - Call 911 or seek medical attention immediately.
- When traveling with a tank wagon, ensure that it is securely attached with a hitch pin, safety clip and safety chains.
- Do not exceed 25 miles per hour when towing a tank wagon.

Discussion Date:

Supervisor:

Participants: