

AMMONIA FOR FARMERS

Anhydrous (meaning “without water”) Ammonia attracts water, so the more moist areas of the eyes, nose, mouth and throat will be severely attacked by the damaging effects of anhydrous ammonia. The human body overall, has a high content of water especially the eyes, which are 95% water and act as a magnet for anhydrous.

Anhydrous Ammonia is a corrosive alkali. Alkalis turn tissue into a sticky “goo” and mix with the tissue, causing further damage. Anhydrous ammonia burns keep spreading until the chemical is diluted.

Anhydrous Ammonia spray causes a freeze-dry effect like frostbite when it hits the skin. The spray is also capable of freezing clothing to the skin so that, if the clothing is incorrectly removed, whole sections of skin can be torn off.

Whenever you are working with or around anhydrous ammonia, chemical splash **goggles** and cotton lined rubber **gloves** must be worn. Goggles must be the non-vented or indirect vented type. Regular chemical gloves without the lining won’t protect your fingers from freezing due to the cold (-28°F) ammonia. Turn the gloves outward to form an outward cuff. This will prevent any liquid from running down your arm off the glove.

Water is the best protection in the event of an emergency and that water should never be far away. It is highly recommended that a small water bottle, small enough to be carried in a shirt pocket, be carried at all times when working with ammonia. This small amount of water could mean the difference between your ability to find the larger source of water or blindly searching for it. A five-gallon container of water must be attached to all nurse tanks and applicators.

INHALATION

If anhydrous ammonia is inhaled, remove victim to an uncontaminated area. If breathing has ceased, immediately give artificial respiration. Send for a physician immediately.

SKIN CONTACT

If possible, remove contaminated clothing at once, wash the affected areas thoroughly with large quantities of cool water. Effected clothing may be frozen to the skin, so dilute the clothing with water to thaw it out before attempting to remove frozen clothing from the skin. Never apply ointments or salves within the first 24 hours after exposure. Contact a physician and inform him or her that you were burned by anhydrous ammonia.

CONTACT WITH EYES

Even if small quantities of ammonia enter the eyes, they should be immediately and thoroughly irrigated with water for a minimum of 15 minutes. The eyelids should be held apart during irrigation so that water can contact all tissues of the eye and lids. Contact a physician immediately. (An eye specialist if possible).

Never wear contact lenses when working around ammonia. Contacts inhibit the effect of the emergency water and may become fused to the eyeball.

HIGHWAY DRIVING

You should always remember that towing a nurse tank presents hazards, which are different than normal highway travel. A nurse tank should never be taken on the highway without checking that the hitch pin, safety clip and safety chains are securely attached. Remember that the stopping distance is greatly increased due to the increased load. A safe speed should always be maintained. Since stopping and turning distance is greater with a single load, it is not recommended that more than one nurse tank be towed. Make sure a proper

slow-moving vehicle (SMV) decal is on the rear of the nurse tank, and do not exceed 35 mph when pulling it.

PARKING

Never park a nurse tank where it would be visible to the public and accessible to ammonia thieves. Do your part to prevent ammonia theft and help stop the spread of methamphetamine production. Do not ever park a nurse tank close to farm buildings, houses, fences, ditches, or other obstacles which could cause you to be trapped or make evacuation difficult, if an emergency should occur. Hillside parking is discouraged. Before leaving a tank unattended, close and secure all valves, which if opened due to theft or vandalism would allow ammonia to discharge into the atmosphere.

HANDLING TIPS:

- **Wear your goggles and gloves!**
- If you are not familiar with the ammonia equipment, or have not received training on proper & safe handling **STOP** do not use any ammonia equipment until you've been trained.
- If a piece of ammonia equipment looks unsafe for any reason **STOP** contact your ammonia dealer to get it fixed.
- When making or breaking any connections or couplings of ammonia equipment: first make sure product & pressure is properly bled off: second, never place your face or body directly in line with the connection.
- Consider the wind direction and stand upwind to the connection.
- Don't hold any valve by the hand wheel, hold only by the valve body, and never point the valve opening toward your face or body or towards anyone else.

The Illinois Fertilizer and Chemical Association, in conjunction with the Illinois Department of Agriculture, has created an excellent training video specifically for farmers. It is available to be viewed, free of charge, at: www.ifca.com

LEAKS

If a serious leak occurs, your first concern is your safety. Always stay upwind of the leak and be aware of any changes in the wind direction.

An abundant supply of water is the best means of providing protection against the effects of escaping ammonia. Your local fire department is the best source for an abundant supply of water, call them immediately.

RELEASE REPORTING

A release of ammonia in excess of the federal reportable quantity of 100 pounds (approx. 18 gallons) requires immediate reporting. Reporting is required within 15 minutes to: the **National Response Center (800-424-8802)**, State Emergency Management Agency (see below), and Local Emergency Planning Committee (LEPC). To comply, determine the amount of release immediately and make all necessary phone contacts.

IL EMA: 800-782-7860

IA DNR: 515-281-8694

WI DNR: 800-943-0003

LEPC: _____

In Iowa, in addition to the federal requirements, releases of less than the 100-pound reportable quantity are reportable when a "hazardous condition" occurs. The existence of a hazardous condition requires the person storing, handling or transporting a hazardous substance, to report to the DNR and the local sheriff. The detection of ammonia in the air at the boundary of a facility is considered the existence of a hazardous condition. A reportable release which is less than the federal RQ is required to be reported as soon as possible but not more than 6 hours after the occurrence.

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