

August 2005 Safety Meeting

Tank Painting Precautions

Meeting Purpose

With summer on us, many propane marketers are actively engaged in painting tanks. This job is considered by most professionals to be very safe. However, propane employees have experienced injuries when prepping and painting propane tanks. The purpose of this meeting is to identify those hazards and discuss ways in which to minimize the threat of injuries while painting and reconditioning tanks. This meeting can also be helpful for employees who perform other work operations out of doors.

Listed below are the hazards associated with tank painting:

- Heat-related injuries
- Fire and explosion hazards
- Damage to eyes from the sun
- Ants, wasps, insects, snakes and related natural threats
- Exposure to skin by solvents and paints
- Grinding, scraping, wire brushing and preparing for painting
- Setting, moving and re-positioning tanks
- Tank repairs and re-valving

Heat-related injuries

Take extra precautions to protect yourself from the effects of heat and sun exposure. If possible, find a shady spot where there is a breeze and air movement. Wear a hat and light, loose fitting clothing. Consider wearing a long-sleeved shirt or apply sun block with at least an SPF rating of 30. Drink plenty of water or sport drinks such as PowerAid, GatorAid or similar electrolyte-replacement drinks. Avoid caffeine and carbonated drinks such as coffee, tea and soft drinks. Monitor yourself carefully, if you stop sweating or feel faint, get help immediately! Avoid working in the hottest part of the day, start early in the morning and quit early in the afternoon. Take frequent rest breaks and if possible, work with partner so each of you can look out for the other.

Fire and Explosion Hazards

Many paints and thinners are solvent-based, which means they are extremely flammable. Be careful where you mix and apply paints. Be aware of ignition sources that could start a fire or explosion. Smoking and certain electrical devices such as a power drill used for mixing have been known to cause fires. Customers have also been known to enter into a painting area and accidentally introduce sources of ignition. Remember, you must be in control of your work environment and being watchful for sources of ignition is your responsibility.

Damage to Eyes From the Sun

Applying light-colored paint to a tank can reflect a tremendous amount of radiant and light energy back to the worker. Workers should always wear high quality sunglasses with appropriate UV protection. The delicate tissues of the eye can become damaged if

over-exposed to high energy light levels. Remember, even if the sun is blocked by clouds, UV rays can enter the eye and cause damage. Some eye injuries take years to develop, don't risk your precious sight, it's far too valuable!

Ants, Wasps, Insects, Snakes and Related Natural Threats

Working around tanks can be dangerous because of natural threats such as snakes, ants and other insects. When approaching a tank, examine the ground carefully for evidence of infestations. Open the tank dome carefully and look for wasps under the dome. Many industry veterans keep a spray can of wasp killer close at hand in case it is needed. Be especially wary of fire ant colonies. Fire ants are easily excitable and they can swarm up a pant leg or arm in no time creating extreme pain, serious injuries and even death! If a fire ant colony is found under a tank, treat the area with fire ant killer and leave the site until all the ants have been killed or they've left the area. Also, be on the lookout for snakes, rodents and other pests. The key is not to be 'surprised' by these animals, deal with them strongly and affirmatively before starting work activities.

Exposure to Skin by Solvents and Paint

As always, refer to the manufacturer's MSDS when working around these chemicals. Generally speaking however, use approved gloves, eye and face protection and refrain from breathing in large amounts of the vapors. Keep materials from coming in contact with your skin. Remember many of these chemicals will absorb into the skin and can cause severe reactions. Read the labels as to how to clean your skin after you've completed your duties.

Grinding, scraping, wire brushing and preparing for painting

These operations can be quite hazardous. Ensure there is not a concentration of propane vapor in the area before you begin work activities. Always wear gloves and eye protection and always thoroughly wash your hands before eating, as your hands will likely be contaminated with compounds including heavy metals such as lead and chromium that could make you ill. Note: hearing protection might also be required when using very noisy grinders and related tools.

Setting, moving and re-positioning tanks

Use extreme care when lifting, moving or re-positioning tanks and cylinders. Ensure you have the proper equipment and that all lifting aids are in good condition. Remember lifting lugs on tanks are only approved if you lift them with no more than 5% liquid. Lugs could fail if the tank contains more than 5% liquid, thereby causing an extreme fire and explosion hazard. Have the necessary blocks, pads, straps and other equipment on hand to ensure these operations go smoothly.

Tank repairs and re-valving

If valves are to be replaced on a tank or cylinder ensure that the tank is empty of propane liquid and vapor. NEVER attempt to re-valve a tank when it contains positive pressure. Use the proper tools and equipment and always control ignition sources. Ensure you have the proper replacement part(s) on hand to immediately re-install in the tank/cylinder, as you never want to leave a tank/cylinder open to the atmosphere for any length of time.

August 2005 Test

Tank Painting Precautions

Name: _____

Date: _____

Instructions: Read and answer each of the following questions. When complete, grade the test and review incorrect answers so each employee is “armed” with the correct answers before they leave the training.

1. When working outside, most experts suggest that employees wear sun block with an SPF rating of at least _____ :
 - a. 10
 - b. 20
 - c. 30
 - d. 40

2. Personal protective equipment should always be considered and used when performing tank painting/reconditioning operations.
 - a. True
 - b. False

3. Solvent-based paints are hazardous for the following reasons:
 - a. they are flammable
 - b. they release vapors that can harm you when breathed in
 - c. all of the above

4. After re-conditioning tanks or cylinders, workers should always thoroughly wash their hands of dirt, grime and heavy metals.
 - a. True
 - b. False

5. ASME tanks should not be lifted by their lifting lugs if they contain more than _____ % liquid.
 - a. 5
 - b. 10
 - c. 15
 - d. 20

August 2005 Test

Answer Sheet

1. a.
2. a.
3. c.
4. a.
5. a.