

November 2015 Safety Meeting

Odorants: Purpose, Characteristics, and Maintenance

As a clean energy source, propane is naturally odorless. Thus, to ensure safety in handling propane, a commercial odorant is added. This odorant (most often, ethyl mercaptan) enables easy detection of any leaks or potential hazards that may be caused by them.

THINGS TO KNOW ABOUT ODORANTS:

- **They stink** – Odorants have an unpleasant and distinctive odor to enable them to be readily identifiable. This is often referred to as a “rotten egg” smell.
- **They are stable** – Propane odorants are inert, so they do not decompose or react with propane or its distribution systems or appliances.
- **They are non-corrosive** – Odorants are noncorrosive under conditions found in gas transmission, distribution, and utilization.
- **They are spotless** – Odorants burn completely in the gas flame to form products that are not corrosive, irritating, or toxic.

Propane gas must be odorized prior to delivery to the bulk plant.

VERIFY ODORANTS AT EVERY DELIVERY AND TANK FILLING:

- Per NFPA 58, you should conduct and document a “sniff test” during any delivery or filling of tanks. This will help determine that the propane is odorized. If the odor seems excessive, this test may indicate that there are leaks or issues at the customer site that need to be remedied.
- If you suspect propane is not properly odorized, follow your company’s policies for responding.

ADDING OR PRESERVING ODORANTS:

With new containers, or ones that have been left open to the atmosphere, you must take precautions to maintain odorant integrity. Follow these practices to keep odorants from oxidizing and fading:

- Purge air and moisture from the propane container.
- Keep propane containers pressurized during shipping and installation at customer locations.
- Keep valves closed on containers in storage to prevent moisture in the air from entering the container. This keeps rust and water from building up inside the container.

“Odorant fade” does not occur in containers that are in continuous use.

November 2015 Test

Odorants: Purpose, Characteristics and Maintenance

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. The most widely used odorant for LP gases is _____, which is added at no less than 1lb. per 10,000 gallons of LP gas.
 - a. Aldehyde
 - b. Hydrocarbon
 - c. Sulfur Dioxide
 - d. Ethyl Mercaptan

2. Propane gas must be odorized prior to delivery to the bulk plant.
 - a. True
 - b. False

3. Per NFPA 58, you should conduct and document a “sniff test” when filling bobtails.
 - a. True
 - b. False

4. “Odorant fade” does not occur in containers that are in continuous use.
 - a. True
 - b. False

5. The following practices should keep odorants from oxidizing and fading:
 - a. Purge air and moisture from the propane container
 - b. Keep propane containers pressurized during shipping and installation at customer locations
 - c. Keep valves closed on tanks and cylinders in storage to prevent moisture in the air from entering the container
 - d. All of the above

**November 2015
Answer Sheet**

- (1). D**
- (2). A**
- (3). A**
- (4). A**
- (5). D**

MONTHLY SAFETY MEETING MINUTES AND ATTENDANCE RECORD

Company Name: _____

City: _____ **State:** _____

Date: _____ **Time Started:** _____ **Time Finished:** _____

Instructed By: _____ **Number Attending:** _____

Subject Covered and Comments:

By my signature below, I certify that I attended and participated in this Safety Meeting and I understand the material presented.

Employee Name (Please print)	Employee Signature	*License Expires	**Endorsements	***Physical Exam
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				

*Driver licenses may be for multiple years and require HazMat testing between license renewal periods. List expiration date.

**Check licenses for proper endorsements and re-testing. (HazMat) List endorsements in this column.

***Physical Examinations are good for 2 years from the original date of the exam or sooner by Physician's request. List original exam date in this column.

By my signature below, I hereby certify that the employees listed above have been trained in accordance with the applicable regulations and curriculum for this monthly safety meeting.

Instructor's Signature: _____ **Date:** _____