



Training Solutions, Delivered!

# **FILLING PROPANE TANKS SAFELY**

**Leader's Guide, Fact Sheet  
& Quiz**

**Item Number: 5288**  
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***This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation.***

## **PREPARING FOR THE MEETING**

Here are a few suggestions for using this program:

- a) Review the contents of the Fact Sheet that immediately follows this page to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheet also includes a list of Program Objectives that details the information that participants should learn from watching the program.
- b) If required by your organization, make an attendance record to be signed by each participant to document the training to be conducted.
- c) Prepare the area and equipment to be used for the training. Make sure the watching environment is comfortable and free from outside distractions. Also, ensure that participants can see and hear the TV screen or computer monitor without obstructions.
- d) Make copies of the Review Quiz included at the end of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the page containing the answers to the quiz comes before the quiz itself, which is on the final page.

## **CONDUCTING THE PRESENTATION**

- a) Begin the meeting by welcoming the participants. Introduce yourself and give each person an opportunity to become acquainted if there are new people joining the training session.
- b) Introduce the program by its title and explain to participants what they are expected to learn as stated in the Program Objectives of the Fact Sheet.
- c) Play the program without interruption. Upon completion, lead discussions about your organization's specific policies regarding the subject matter. Make sure to note any unique hazards associated with the program's topic that participants may encounter while performing their job duties at your facility.
- d) Hand out copies of the review quiz to all of the participants and make sure each one completes it before concluding the training session.

# 5288 FILLING PROPANE TANKS SAFELY FACT SHEET

**LENGTH: 6 MINUTES**

## **PROGRAM SYNOPSIS:**

Propane has a variety of uses, including fueling forklifts. To accomplish this, it is frequently stored in cylinders. When a cylinder is empty, it will need to be refilled. Propane is highly flammable in gas and liquid forms, but it can be used safely by following a few simple safety procedures. This brief program highlights the main safety procedures to use when refilling a propane tank.

## **PROGRAM OBJECTIVES:**

After watching the program, the participant will be able to explain the following:

- The PPE needed when using propane;
- How to inspect a propane tank;
- How to connect an empty cylinder to a larger propane supply;
- What to do in the event of a leak or spill.

## **INSTRUCTIONAL CONTENT:**

### **PERSONAL PROTECTIVE EQUIPMENT**

- Propane has a variety of uses, including fueling forklifts. It is highly flammable in gas and liquid forms, but it can be used safely by following a few simple safety procedures.
- First and foremost, no smoking near any propane containers or equipment that uses propane.
- Next, personal protective equipment or PPE.
- Appropriate eye and face protection and proper gloves must be worn when connecting and disconnecting propane cylinders from their hoses due to the possibility of freezer burn, which propane can cause instantaneously.
- Thin, tight fitting gloves are not recommended.

### **INSPECTING THE TANK**

- Before you fill a propane tank, be sure to check that the tank is in good condition.
- Rotate the tank and check for any visual damage such as dents, bulges or welds on the surface.
- If the tank has any damage on the outside, avoid filling it since it's less stable than a new tank.
- If the tank also has a coat of rust on the outside, don't use or fill it, since it could be unsafe.
- Propane tanks cannot be filled unless they have an overfilling protection device or OPD.
- Look at the top of the propane tank to find the valve used to open it. If the valve has a triangular shape or has the letters OPD printed on it, then it's safe to fill. If it doesn't have a triangular valve, then you cannot fill the tank safely.
- Confirm that the date printed on the tank is less than 12 years ago. Standard propane tanks you would use in a gas grill will only last for 12 years because they need to be recertified.
- Look around the collar of the tank, which is the raised round area surrounding the valve. If the tank is older than 12 years, then either replace it or have it inspected by a professional propane service.
- If your tank was recertified, there may be a second date printed on the collar with the letter E next to it.
- Use the most recent date, rather than the first one printed.
- The collar of the tank will list the weight of the propane your tank can hold as well as the weight of the empty tank in pounds.
- Write down or snap a picture of both the numbers so you know how much propane you should add to your tank when you fill it.

### **CONNECTING A TANK TO A LARGER SUPPLY**

- Connect the empty propane tank to a larger propane supply with a connector hose.
- Screw the connector hose counterclockwise onto the port attached to the valve on your empty tank until it's hand tight. Then use a wrench to tighten the connection so it doesn't leak.

- Make sure the other end of the hose is connected to the port on the supply tank you're transferring propane from.
- Open the valves on each of the propane tanks, turn the valve on the empty tank counterclockwise, open it and let the propane inside.
- Then open the valve on the tank you're transferring propane from by turning it counterclockwise.
- You will start to hear the propane hissing through the connector hose once both of the tanks are open.

#### **FILLING OF THE CYLINDER**

- Since propane expands when it's hot, you could only fill it up to 80% full so it doesn't burst when it gets hot.
- Calculate 80% of the tank's capacity and add the tank weight to find how much your tank will weigh when it's full.

When the tank reaches the weight you calculated, rotate the valves on both tanks clockwise to close them.

- Open the bleeder valve on the tank you filled to make sure it isn't too full.
- Gloves will help protect you from any liquid propane.
- Turn the screw counterclockwise with a screwdriver to open the bleeder valve.
- If liquid squirts out of the valve, leave it open until there's only vapor. If gas or vapor comes out of the valve, turn the screw clockwise to seal it again.

#### **STORAGE OF CYLINDERS**

- Store all cylinders that are not in use in an open-air storage unit or cage with a protective roof overhead, at least 20 feet from other buildings and away from flammable or combustible materials.
- Do not store cylinders in your doorways, stairways, exits or high traffic areas.
- When a cylinder is not in use, close the valve to lessen the chance for a leak.
- Monitor the dates located on the cylinder collar to replace or exchange cylinders that are out of date.

#### **WHAT TO DO IN THE EVENT OF A LEAK OR SPILL**

- In the event of a spill or leak, evacuate the area immediately.
- Isolate the hazard area. Keep out unnecessary and unprotected personnel.
- Evacuate downwind locations.
- Eliminate all ignition sources. Use grounded explosion proof equipment.
- Distant ignition and flashback are possible. Monitor area for flammable or explosive atmosphere.
- Before entry, especially into confined areas, check atmosphere with an appropriate monitor. Test for sufficient oxygen levels.
- If possible, turn leaking containers so gas escapes rather than liquefied gas.
- Contact emergency services and manufacturer supplier for advice.
- Contact supplier, local fire and emergency services for help. Report spills to local health safety and environmental authorities as required.
- Propane is potentially hazardous.
- Did you notice we said "potentially?" That's because if you follow the rules, that's what hazards are - potential and you should be able to work with and around propane safely.
- If you have any questions about the information in this video or any other propane safety related questions, stop and ask your supervisor for guidance and clarification.

**FILLING PROPANE TANKS SAFELY**

**ANSWERS TO THE REVIEW QUIZ**

1. a

2. c

3. a

4. b

5. a

6. d

**FILLING PROPANE TANKS SAFELY**  
**REVIEW QUIZ**

*The following questions are provided to determine how well you understand the information presented in this program.*

Name \_\_\_\_\_ Date \_\_\_\_\_

1. Appropriate eye and face protection and proper gloves must be worn when connecting and disconnecting propane cylinders from their hoses due to the possibility of freezer burn, which propane can cause instantaneously.
  - a. True
  - b. False
  
2. Standard propane tanks last for \_\_\_\_\_ before needing to be recertified.
  - a. 3 years
  - b. 8 years
  - c. 12 years
  - d. 20 years
  
3. You will start to hear the propane hissing through the connector hose once both of the tanks are open.
  - a. True
  - b. False
  
4. Since propane expands when it's hot, you could only fill it up to 20% full so it doesn't burst when it gets hot.
  - a. True
  - b. False
  
5. When a cylinder is not in use, close the valve to lessen the chance for a leak.
  - a. True
  - b. False
  
6. In the event of a leak or spill, you should \_\_\_\_\_.
  - a. Evacuate the area immediately
  - b. Isolate the hazard area
  - c. Eliminate all ignition sources
  - d. All of the above