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Small Propane Cylinder Safety

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Propane is an extremely flammable gas that is used quite often. Whether with the barbecue grill, camping in a travel trailer, running a propane-fueled forklift at work, or using a propane heater to warm up with, we need to make sure that we stay aware of the hazards that are associated with the use of propane. Propane cylinders come in a variety of sizes, from 10 to 100 pounds; but no matter the size, they can still be a danger if not used correctly.

Propane cylinders with a capacity of less than 40 pounds must have an Overfill Protection Device (OPD). An OPD is a safety feature that helps prevent small propane cylinders from being overfilled. An overfilled cylinder doesn't have enough space for the liquid to expand when exposed to warmer temperatures. All propane cylinders without an OPD are prohibited from being refilled by anyone. The OPD serves as a safety shutoff device and prevents overfilling of propane cylinders to avert propane release, fire, and possible injury. Propane cylinders equipped with an OPD have the letters "OPD" stamped on the valve hand wheel and on the side of the valve. Most propane cylinders with a triangular valve wheel have an OPD. Propane cylinders with a round or star-shaped valve wheel usually do not have an OPD.

Propane cylinders must be "in date." A tank's manufacture date is stamped into the collar of the tank. It is in this format: 05-12. A tank is in compliance for twelve years from the original manufacture date, so a tank manufactured in 05-12 is good until 05-24. If a tank is out of date, you have a couple of options: you can have it requalified (definitely worth it for any size tank besides BBQ tanks) or if it is a BBQ sized tank (5 gal/20 lb), you can exchange it. Requalifying a tank certifies it for another five years. When this is done, the date stamp will have an "E" at the end of it: 05-12E. A tank can only be requalified three times. After that it must be recycled.

Cylinder Use

- Check hose connections for leaks by brushing a 50% liquid dish soap and 50% water solution onto all hose connections and valves. Bubbles indicate a leak. If you encounter a leak, shut off the propane at the tank, if it's safe to do so and tighten hose connections. Check again for leaks using the dish soap and water solution. Never use matches or lighters to check for leaks.
- Inspect the propane cylinder for cuts, gouges, dents, and rusting and replace if necessary.
- NEVER use a damaged cylinder or one that has been in a fire.



- Remember, empty propane cylinders are equally as dangerous as full cylinders and the same safety precautions must be followed. NEVER attempt to disassemble or cut open a propane cylinder, which could result in an explosion and flash fire.
- Propane cylinders are painted a light or reflective color to reduce heat absorption from the sun, which increases the internal pressure within tank. Never paint a propane cylinder a dark color.
- **DO NOT UNDER, ANY CIRCUMSTANCES, TRY TO MODIFY OR REPAIR VALVES, REGULATORS, OR OTHER CYLINDER OR APPLIANCE PARTS.**

Storage of Small Propane Cylinders

- NEVER store, place, or use a propane cylinder indoors or in an enclosed area such as a basement, garage, shed, or tent.
- NEVER store or place a propane cylinder in an area of excessive heat (120 degrees or higher) or near a stove, fireplace, or other heat source. The heat causes pressure to build up inside the cylinder, which may cause the pressure relief valve to release propane. Flash fires or explosions can result from exposing the cylinder to heat.
 - NEVER store or place a spare cylinder under or near a barbecue grill.
 - DO NOT smoke or have any ignition sources such as flames or spark-producing electrical tools in the area while handling or transporting cylinders.

Transportation of Small Propane Cylinders

- ALWAYS transport and store a cylinder in a secure and upright position to ensure that the safety release valve will function properly and that the cylinder will not fall, shift, or roll.
- ALWAYS close the cylinder valve and, if required, seal with a plug, even if the cylinder is empty.
- NEVER keep a filled cylinder inside a hot vehicle or transport it inside a closed trunk.
- ALWAYS place the cylinder in a well-ventilated part of the vehicle.
- ALWAYS proceed directly to your destination and immediately remove the cylinder from your vehicle.

Propane is a wonderful thing when it is used, stored, and transported correctly. Please be mindful of those small propane cylinders when you are out enjoying yourself this upcoming year.