

# Propane

## Explain dangers

Explosion and asphyxiation are the main risks with propane. Asphyxiation means loss of consciousness and suffocation.

Propane gas by itself is odourless. But suppliers add a strong-smelling chemical to the gas so that you can smell leaks. The smell is like rotten cabbage.

Propane gas is heavier than air. If it leaks from equipment or cylinders, it can accumulate in low-lying areas such as basements, pits, and trenches.

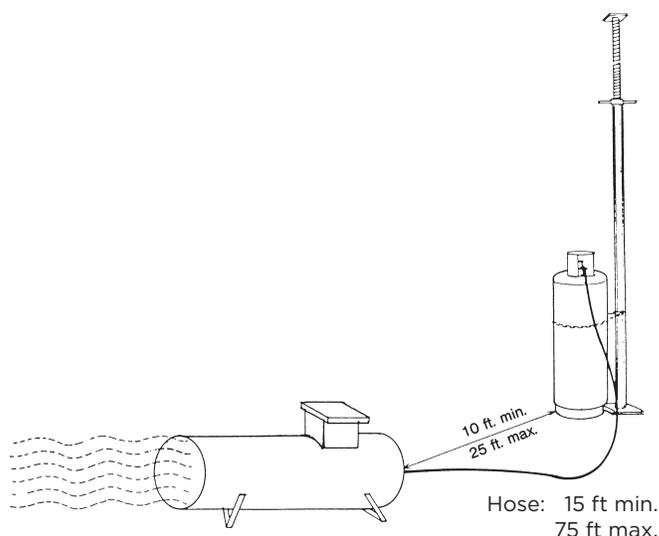
If enough propane gas collects in a low-lying area, it will displace the air. If you enter that area you may be overcome and lose consciousness.

Propane will explode if ignited. Simply turning on a light switch or an electric drill can ignite propane in high concentrations such as in a basement or trench.

Propane-fired equipment releases carbon monoxide (CO). Even in small doses, CO can kill you. It's a clear, colourless gas that you can't smell or taste. The first signs of CO poisoning are headache and fatigue.

## Identify controls

- Don't store propane cylinders inside. Any cylinders that are not being used (i.e., hooked up to equipment) should be kept outside.
- Only a certified ROT holder is allowed to connect, disconnect, and operate propane cylinders.
- Always have a 4A40BC fire extinguisher nearby.
- Don't tamper with controls or safety devices.
- The best way to prevent leaks is to handle propane cylinders and equipment properly.
- Whether you're transporting, using, or storing cylinders, make sure the relief valve is in contact with the vapour space in the cylinder.
- Never expose any part of your skin to liquid propane. Propane under pressure is extremely cold and can cause frostbite or cryo-burns.



- Propane cylinders that are connected to heaters must be secured and kept at least 10 ft (3 m) away from them. The hose length must be between 15 and 75 ft (4.6 and 23 m). (See diagram above.)
- Don't let propane saturate your clothing. It may not feel or smell unusual, but clothing can remain highly flammable for some time after exposure. Saturated clothing should be aired outside. Never put them in the dryer.

If propane equipment such as a torch or heater goes out in a confined space or low-lying area, act quickly.

- Shut off the gas and leave the area.
- Don't go back to re-light the equipment.
- Don't enter the area. Inform your supervisor.

## Demonstrate

Review the safety data sheet (SDS) for propane with your crew and show them where to find it on site for future reference.

Review the on-site procedures for storing, handling, and using propane (refer to the safety talk on compressed gas cylinders).

Review the signs of CO poisoning with the crew (refer to the safety talk on carbon monoxide).