



Compressed Gas Cylinders

Gas cylinders look tough, but they present a variety of very real hazards. Those hazards include fire, explosion, poisoning, asphyxiation, and physical dangers. They must be stored, transported, and used safely.

When a compressed gas cylinder is damaged and gas escapes, bad things happen. Flammable gases like acetylene can cause fires and explosions. Toxic gases can quickly create a hazardous atmosphere. Some gases will displace or reduce the amount of oxygen normally available in the air you breathe—you can suffocate before you even realize you're in trouble. If a cylinder falls over and the valve breaks off, it can become an uncontrolled missile capable of breaking through walls and injuring or killing anyone in its way. Here are some things you should know about gas cylinder safety:

Storage:

- Keep cylinders away from electrical circuits, flames, and other sources of ignition. Don't smoke around cylinders.
- Keep cylinders away from flammable materials such as oil, solvents, or gasoline.
- Store cylinders in well-ventilated areas. Store full cylinders and empty ones separately.
- Store cylinders upright and secure them with a chain. Never leave cylinders unsecured.
- Do not use cylinders as rollers to move or support any load. They should only be used to store, and transport compressed gas.

Transportation:

- Always transport cylinders with the safety caps in place. Never lift or carry a cylinder by the valve.
- Use a hand truck to move cylinders. Never drag or roll them across the ground or the floor.
- Don't lay compressed gas cylinders down in the back of a pickup truck.

Use:

- Only use cylinders that are clearly labeled.
- Read the Safety Data Sheet. Understand how to use the gas safely before you open the valve.
- Inspect compressed gas cylinders for corrosion, pitting, cuts, gouges, digs, bulges, defects, and general distortion before use. Have the supplier replace damaged cylinders.
- Always use a cylinder wrench to tighten or loosen the regulator.





- When opening a cylinder, stand to the side and open the valve slowly.
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SAFETY REMINDER

Cylinders containing flammable gas should be separated from oxygen cylinders by a minimum of 20 feet unless there is a 5-foot-high fire-resistant barrier between them.