

18. COMPRESSED GAS

HANDLE WITH CARE. USE SAFELY. SAVE LIVES.



**CORPORATE SAFETY
TRAINING & CONSULTING**

www.corporatesafety.co.in

WHY THIS MATTERS

Compressed gases can be extremely dangerous if mishandled. Cylinders can explode, become projectiles, leak, or cause fire or asphyxiation.

Follow safe handling and storage practices every time.

COMMON HAZARDS

FIRE / EXPLOSION
Cylinders or leaked gas can ignite and explode.

HIGH PRESSURE
Cylinders are under high pressure and can burst.

OXYGEN ENRICHMENT
Oxygen leaks can make materials easy to ignite and burn faster.

ASPHYXIATION
Inert gases can displace oxygen and cause suffocation.

CYLINDER IMPACT
Falling or unsecured cylinders can become dangerous projectiles.

WRONG WAY ❌

- ❌ Cylinders not secured
- ❌ Stored near heat or flame
- ❌ Grease or oil on equipment
- ❌ Wrong regulator
- ❌ No valve protection cap

Unsafe handling can lead to leaks, explosion, fire, or serious injury.

RIGHT WAY ✅

- ✅ Cylinders secured upright
- ✅ Stored in a cool, ventilated area
- ✅ Keep caps on when not in use
- ✅ Use the correct regulator
- ✅ Inspect for leaks and damage

Safe handling protects you, your coworkers, and your workplace.

KEEP AREA CLEAN AND CLEAR

SAFE HANDLING – 8 KEY RULES

- KEEP UPRIGHT**
Store and use cylinders in an upright position and secure them at all times.
- CAPS ON**
Keep the valve protection cap in place when the cylinder is not in use.
- KEEP COOL**
Store away from heat, sparks, open flames, and direct sunlight.
- CHECK BEFORE USE**
Inspect cylinder, valve, and regulator for damage and leaks.
- USE CORRECT EQUIPMENT**
Use the right regulator and fittings for the correct gas.
- KEEP OIL & GREASE AWAY**
Never use oil, grease, or flammable substances on cylinders or valves.
- TRANSPORT SAFELY**
Use cylinder carts. Never drag, roll, or slide cylinders.
- CHECK FOR LEAKS**
Use soapy water to check for leaks. Never use a flame.

DO'S – FOLLOW THESE

- ✓ Secure cylinders with chains or straps.
- ✓ Store in a well-ventilated area.
- ✓ Read the label and know the gas.
- ✓ Close the valve when not in use.
- ✓ Use the proper PPE for the job.
- ✓ Report any leak, damage, or defect.
- ✓ Follow all procedures and training.

DON'TS – AVOID THESE

- ❌ Don't drop, bump, or strike cylinders.
- ❌ Don't use cylinders as rollers or supports.
- ❌ Don't expose cylinders to heat or flame.
- ❌ Don't remove or deface labels.
- ❌ Don't use damaged cylinders or equipment.
- ❌ Don't force valve or use the wrong tools.
- ❌ Don't leave cylinders unsecured.
- ❌ Don't use oil or grease on equipment.

PPE REMINDERS

- 👓 Safety glasses or face shield
- 🧤 Gloves
- 👟 Safety shoes
- 👂 Hearing protection (as required)
- 👕 Use flame-resistant clothing when required

DISCUSSION QUESTIONS

1. What are the main hazards of compressed gases?
2. Why is it important to keep cylinder caps on?
3. How should cylinders be stored and secured?
4. What should you do if you suspect a leak?

KEY TAKEAWAY

COMPRESSED GAS SAFETY IS EVERYONE'S RESPONSIBILITY.

- ✓ Handle with care.
- ✓ Follow the rules.
- ✓ Inspect every time.
- ✓ Report issues.
- ✓ Go home safe.

REAL-LIFE EXAMPLE

A contractor noticed a leaking oxygen cylinder during setup. He reported it immediately, the area was ventilated, and the cylinder was removed safely. Thanks to his quick action, a potential fire was prevented and everyone went home safe.

COMPRESSED GAS CHECKLIST

<input checked="" type="checkbox"/> Cylinders secured upright	<input checked="" type="checkbox"/> Equipment inspected and leak-checked
<input checked="" type="checkbox"/> Valve protection cap in place when not in use	<input checked="" type="checkbox"/> PPE used as required
<input checked="" type="checkbox"/> Stored away from heat and flammables	<input checked="" type="checkbox"/> Area well ventilated
<input checked="" type="checkbox"/> Correct regulator and fittings used	<input checked="" type="checkbox"/> Procedures followed

EMERGENCY – IF YOU SUSPECT A LEAK

1. Close the cylinder valve if safe to do so.
2. Do not use any ignition sources.
3. Ventilate the area.
4. Evacuate if necessary.
5. Report to your supervisor immediately.

REMEMBER

- ✓ Compressed gas cylinders are tools, not toys.
- ✓ Treat every cylinder as if it is full.
- ✓ Secure it. Protect it. Use it safely.
- ✓ Your actions save lives.

SUPERVISOR SIGN-OFF

Discussed with crew by: _____ Date: _____

SAFETY MESSAGE
Safe handling of compressed gases prevents incidents, protects your team, and keeps our workplace safe.

