

cylinder safety

top ten steps

1. Read labels and Material Safety Data Sheet (MSDS) before use.
2. Store upright and use in well ventilated, secure areas away from pedestrian or vehicle thoroughfare.
3. Guard cylinders against being knocked violently or allowed to fall.
4. Wear safety shoes, glasses and gloves when handling & connecting cylinders.
5. Always move cylinders securely with an appropriate trolley. Take care not to turn the valve on when moving a cylinder.
6. Keep in a cool, well ventilated area, away from heat sources, sources of ignition and combustible materials, especially flammable gases.
7. Keep full and empty cylinders separate.
8. Keep ammonia based leak detection solutions, oil and grease away from cylinders and valves.
9. Never use force when opening or closing valves.
10. Don't repaint or disguise markings and damage. If damaged, return to BOC immediately.



Further details regarding these steps and other actions you can take for safer storage and handling are on the back of this flyer.

Safety is of paramount importance to BOC - there are no higher priorities for us than the health and safety of our employees, customers, suppliers and the community.

This poster provides important information on the safe handling and storage of gas cylinders. Please display it prominently near your cylinder storage area.

Remember, always read the label & Material Safety Data Sheet (MSDS) before use.

Storage of cylinders

All cylinders should be considered and treated as full, regardless of their content. This means:

- Keep cylinders away from artificial heat sources (eg. flames or heaters).
- Do not store cylinders near combustible materials or flammable liquids.
- Keep flammable gases away from sources of ignition.
- Keep cylinders in well drained areas, out of water pools or ponds.
- The storage area should be kept well ventilated and clean at all times. Ideally do not store in confined spaces.
- Avoid below ground storage, where possible. Where impractical, consider enclosed space risks.
- There should be good access to the storage area for delivery vehicles. The ground surface should be reasonably level and firm (preferably concrete).
- Storage area should be designed to prevent unauthorised entry, to protect untrained people from hazards and guard cylinders from theft.
- Different types of gases must be stored separately, in accordance with State Dangerous Goods legislation. Also refer to AS4332 (The Storage and Handling of Gases in Cylinders).
- Stores must clearly show signage in accordance with state Dangerous Goods regulations. This includes Class Diamonds; HAZCHEM; no smoking and naked flame warning signs.
- Full and empty cylinders should be kept separate.
- Toxic and corrosive gases should be stored separately from all other gases.

- Liquefied flammable cylinders must be stored upright on a firm, level floor (ideally concrete). This is also preferable for most other gas cylinders.
- Store cylinders away from heavy traffic and emergency exits.
- Rotate stock of full cylinders, and use cylinders on a 'first in, first out' basis.
- Never repaint or obscure cylinder label, even if cylinder is rusty, dirty or damaged. This can result in unsafe situations.
- Never apply any unauthorised labels or markings to cylinders, unless advised by BOC to identify faulty cylinders.
- Avoid storing cylinders below 0°C. Some mixtures may separate below this.
- Regularly check for leaks and faults.
- Keep ammonia based leak detection solutions, oil and grease away from cylinders and valves.
- Never use force when opening or closing valves.

Handling of cylinders

When handling gas cylinders, and in line with current manual handling regulations, it is advisable that the following precautions are followed:

- Larger cylinders are heavy. Manual handling risk assessments and training should be undertaken.
- Safety shoes, glasses and gloves should be worn when handling and connecting cylinders
- Cylinders should be handled with care and not knocked violently or allowed to fall.
- Cylinders should be moved with the appropriate size and type of trolley.
- Ensure you do not inadvertently turn the cylinder valve on when moving a cylinder.
- Cylinder valves must be closed when moving cylinders and equipment should be detached.
- Only people trained in cylinder manual handling should move cylinders over short distance.
- Over longer distances, use appropriate trolleys or pallets, and firmly secure cylinders into them.
- Never roll cylinders along the ground as this may cause the valve to open accidentally. It may also damage the cylinder, label and paintwork.



Gas Cylinders Safety

PLAN FOR EMERGENCIES

- If a cylinder is damaged contact BOC immediately.
- Those people with a responsibility for storing or using gas cylinders should be trained and familiar with the procedures to be followed in case of an emergency.
- Storage area layouts and emergency procedures should be carefully planned, recognising the possibility of an emergency arising.

**In case of emergency,
call 111 and
BOC on 0800 111 333**

BOC is a leading provider of gases and related products, services and solutions in the South Pacific.

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