



## Safety instruction.

# Safe handling and storage of gas cylinders.



The following practical measures are recommended for the handling and storage of cylinders. Transport and storage must also take into account the regulations of the authorities.

#### General

- 1. Only experienced and properly trained persons should handle cylinders.
- 2. A gas cylinder is a high-pressure vessel that must be handled with care.
- 3. Do not remove or deface labels placed on cylinders by the supplier.
- 4. Check the contents of the cylinder before using it.
- 5. Learn about the properties and hazards of the gas before you use it.
- 6. If you are unsure about the correct handling of a gas, contact the manufacturer first.

## Handling and use

#### 1. Always wear protective gloves.

- 2. Do not mechanically lift the cylinder from the cap or cover. The cylinder can be handled manually from the protective hood.
- 3. Always use a cylinder trolley or cylinder basket to transfer cylinders.
- 4. The flip-top hood must always be in place when the cylinder is moved. The open hood must not be removed.
- 5. Use a soap solution for leak checks.
- 6. Always use a pressure regulator designed for the gas in question. The use of spacers is prohibited.
- 7. Check the correct pressure class of the equipment before connecting the cylinder.
- 8. Backflow into the cylinder must be prevented (e.g. by means of a non-return valve) before the cylinder is connected.
- 9. Open the cylinder valves slowly.
- 10. Never heat the cylinder.
- 11. Gas transfer from one cylinder to another is prohibited.
- 12. Never use the cylinder as a roller or work surface.
- 13. Keep cylinder valves and fittings clean of oil and dirt.
- 14. Cylinders must be reliably prevented from tipping over.
- 15. Cylinders must be protected against mechanical shocks.
- 16. Always close the valve when the cylinder is not in use.
- 17. Empty cylinders must always be treated in the same way as full cylinders.

### Damaged cylinders

If any cylinder is damaged in use, it must be clearly marked and returned to the supplier. Under no circumstances should you attempt to repair or conceal damage, as this may cause harm to other people.

## Storage

- 1. The cylinders should be stored in a designated area that is well ventilated.
- 2. Store the cylinders in a place where there is no fire risk and away from heat and ignition sources.
- 3. The cylinder store must be kept tidy and access must be restricted to authorised persons. The area should be clearly marked with appropriate warning signs.
- 4. Smoking and open fires in and around the warehouse are prohibited.
- 5. Gas cylinders must be stored in an upright position. Cylinder valves must be kept properly closed and cylinder valve covers or domes must be kept in place.
- 6. Store empty and full cylinders separately.
- 7. Cylinders containing different gases must be stored separately in the storage area.

## Measures in case of fire

- 1. Alert the fire department.
- 2. Evacuate the area.
- 3. Remove cylinders from a fire area if it is safe to do so.
- 4. If the cylinders cannot be removed and the fire cannot be extinguished immediately, cool the cylinders with water from a protected place.
- 5. Clearly mark the cylinders that were on fire and inform the supplier.

The supplier can provide further information on any special problems that may arise in the storage and handling of gases.