

Operating Instructions pressurized Gas cylinders

Building: SupraFAB

Area of application:
Freie Universität Berlin
Altensteinstr. 23a



Operating Instructions – Working with pressurized Gas cylinders

According to Occupational Health and Safety Regulation

Work space: SupraFAB
cabinets: 015, 022, 023, 024, 027, 029, 114,

Work station: Gas cylinder storage and
Room 115, 136, 217, 218, 219, 222

Hazards for people and the environment



- GHS classification: H280-Contains gas under pressure; may explode if heated.
- In the event of leaks, highly flammable, oxidizing or toxic substances may be released to a dangerous extent
- In addition, the release of large quantities of reactive (inert) gases in enclosed spaces can displace the oxygen required for breathing.
- If the valve is opened quickly/the gas escapes, ice may form, gas may ignite and electrostatic charging may occur.
- Due to the weight of the cylinders, there is a considerable risk of injury when handling and transporting them.
- Improper and incorrect handling of the compressed gas cylinder / pressure reducer can lead to accidents with serious injuries.

Protective measures and rules of behaviour



- The fire protection framework regulations of the FU apply!
- Areas in which pressurized gas cylinders are used or stored must be marked with warning notice W29 "Warning of gas cylinders". The number and size of pressurized gas cylinders must be limited to the essential.
- Compressed gas cylinders may only be stored in a safe place (R14 cylinder storage room) that is free from fire loads or at a sufficient distance from fire loads (TRG280).
- Secure pressurized gas cylinders against falling over and dropping, as well as shock, impact and impact-like stress
- Protect pressurized gas cylinders from excessive heating.
- Compressed gas cylinders may only be transported on cylinder transport trolleys provided for this purpose with the protective cap screwed on.
- Compressed gas cylinders without protective caps must be transported in accordance with the manufacturer's instructions.
- When transporting and handling large compressed gas cylinders (≥ 50 l), a second person must be consulted.
- Pressure reducers must be selected according to the type of gas and gas cylinder. The required pressure reducing valves may only be fitted or removed by qualified personnel. The pressure reducer must be regularly checked for leaks.
- If the gas supply is interrupted for a longer period, the cylinder valves must be closed. If a valve cannot be opened by hand or closed tightly, the pressurized gas cylinder must be classified as defective and must not be used any further.
- Storage and handling only in a permanently extracted location. The access must be regulated.

Behaviour in case of danger

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- Observe the operating instructions or safety data sheet for the gas used!
- Operate the emergency stop switch, avoid electrical switching operations (light), leave the room immediately.

In case of fire: Keep calm!

Call the fire department on 112! Inform the central control room on 55112!

Warn employees! Inform the person responsible for the area!

Fight the fire with a powder, CO₂ or foam extinguisher! Pay attention to self protection.

First aid



Inform first aiders (see alarm plan). Treat minor injuries immediately and enter them in the first aid book.

In the event of more serious injuries, consult a general practitioner or call an emergency doctor.

Inform the workshop management.

Rescue service: **112**

Proper disposal- service

Repairs and inspections may only be carried out by authorised, qualified persons.

For further questions, please contact the Occupational Safety department

Tel.: -54495

Date and signature of division manager: