

Graf. Garrison

Operating Instructions

Date: _____
Installation: _____
Unit: _____

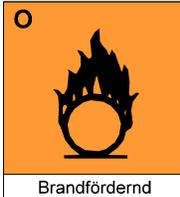
Working Area: Workshop
Workplace/Activity: Repair / Maintenance / Storage

Hazardous Substance Group

Oxygen (in compressed gas cylinders)

Example: use of oxygen gas for welding

Hazard for Human Health and the Environment



- Danger of fire when in contact with flammable substances
- Explosive reaction of oxygen when in contact with grease or oil
- Oxygen may fill up in clothes through uncontrolled leakage of gas cylinders; these clothes thus become highly inflammable and may catch fire spontaneously, e.g. through electric discharge
- A strong rise in temperature of gas cylinders increases danger of bursting, oil/grease at fittings may also lead to bursting of gas cylinders



Protective Measures and Behaviour Rules



- Make sure gas cylinders and fittings are absolutely tight
- Avoid contact with oil and grease, keep fittings absolutely free of any grease!
- Wear **safety goggles** and **safety gloves** during welding (e.g. against burns)
- Use gas cylinders of oxygen only in well ventilated areas
- Ignition of the burner only with appropriate gas lighter, matches or cigarette lighters are inappropriate
- Storage areas of compressed gas cylinders need to be well ventilated, keep away any sources of ignition
- Do not store gas cylinders together with flammable materials
- Prevent gas cylinders from falling, e.g. through chains, bars
- Protect compressed gas cylinders against strong warming up – danger of bursting
- During transport use appropriate carriage



Behavior in Danger Situations



- **Extinguisher media:** Dry chemical, carbon dioxide, foam or water (check extinguishing medium against surrounding)
- **Special fire hazards:** Oxygen is not flammable itself, but intensifies a fire considerably! Warn fire fighters of gas cylinders to be present !
- **Accidental release:** Leave danger zone, provide adequate ventilation, avoid any sources of ignition

EMERGENCY NUMBER: 117 (Fire Department)
NEXT PHONE: _____

First Aid



- **Inhalation:** Continuous inhalation of oxygen concentrations > 75% may lead to sickness, dizziness, difficulty in breathing, spasms, up to loosing of consciousness
- Remove to fresh air, take a rest and keep warm, give artificial respiration if needed, seek medical attention
- Take off clothing filled up with oxygen immediately and air these at a distance from any source of ignition

EMERGENCY NUMBER: 117 (Fire Department)
NEXT PHONE: _____

Proper Disposal



After use, close valve immediately and screw on the protection/safety cap. Damaged and empty compressed gas cylinders should be disposed of as soon as possible.

Additional Remarks

Special information with reference to possible hazards for human health and environment as well as to hazard characteristics should also be taken from the **Material Safety Data Sheet (MSDS)**. For further information please refer to "**General Operating Instructions**".