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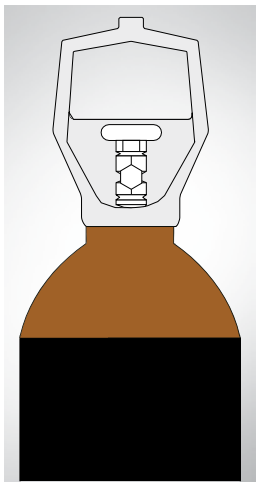
# Safety instruction.
## Helium He.



Helium He (Industrial)

**Features**

Gaseous helium is colourless, odourless and tasteless; it is the second lightest known gas, with a density one-seventh that of air.
Liquid helium is odourless, colourless and boils at - 269°C. One litre of helium yields about 740 litres of gaseous helium.
Helium is non-corrosive, non-flammable and non-toxic.

**Security risks**

An increase in the concentration of helium in breathable air poses a risk of asphyxiation and is not detectable without equipment.
Breathing pure helium causes instant unconsciousness and almost instant death.

**Frostbite**

Liquid helium and cold helium vapours can cause skin damage similar to burns. Contact of bare skin with uninsulated parts of the device may cause the skin to stick and tear when removed. If this happens, the damaged areas should be immediately rinsed with plenty of lukewarm water and not rubbed. Contact the medical staff.

**Diving gases**

Various types of helium-oxygen or helium-oxygen mixtures are used as breathing gas in deep-sea diving where the water pressure is very high.
**However, these diving mixtures should never be used on land or in shallow water as breathing gas, as they have such a much lower oxygen content that there is a risk of suffocation.**

**Choice of material**

Certain steels, such as carbon steel and some other materials, are unsuitable for use at low temperatures because they lose their impact resistance and become very brittle.
Materials normally suitable for use at low temperatures include stainless steel, aluminium, copper and its alloys.
Where liquid helium is handled, care must be taken to ensure that it does not come into contact with unsuitable materials such as cold-hardened steel or vehicle tyres.

**Security measures**

Rooms where helium is stored or used should be well ventilated. Do not enter a room where there may be elevated helium levels. When in doubt, the air should be tested with a leak detection spray and/or breathing equipment should be used. When handling liquid helium, wear suitable gloves and eye protection, safety shoes and body protection.

**Fire prevention**

Helium is not flammable and therefore no special fire extinguishing equipment is needed. If possible, move the cylinders to a safe place. Protect gas cylinders from heating to avoid the risk of explosion. Flammable gases should be stored separately from other gases.

Helium N gas is used to inflate balloons.

Oy Linde Gas Ab, www.linde-gas.fi

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