



## Personal Protection Equipment, when handling liquid nitrogen. PPE.

### Personal protection equipment

Personal protection equipment when handling liquid nitrogen is equipment intended to be worn by a person to protect against splashes and severe frostbite caused by liquid nitrogen. Portable oxygen alarms warn of low oxygen level in a room.

Linde Healthcare cooperates with well-known suppliers of personal protection equipment.

### Visor/Face shield



Protects the upper part of the head, face and chin. Adjustable and lockable fastening strap, which can be removed, easily cleaned and replaced. The visor has several tilting positions and soft padding inside the cover. Visor material: polycarbonate.

Standards: EN166, EN169, EN170. CE-marked according to ISO 9001/2000

For technical information see separate product datasheet from Honeywell.

### Apron



An apron protects the body and upper parts of the legs. Protects well against splashes of liquid nitrogen. Made of an extra durable composite coated fabric and is waterproof. The apron has adjustable straps with buckles at both collar and waist.

Available in sizes: 70x90 cm, 70x110 cm, 70x120 cm and 70x135 cm

Standards: EN 388, EN 511, CE 0302

For technical information see separate product datasheet from CRYOKIT.

### Gloves



The gloves are waterproof to protect hands and arms when handling liquid nitrogen (or other cryogenic gases). Made of specially designed composite material that keeps the hands warm and dry even during long period of use. The construction is a multi-layer that provides a high level of thermal protection and flexibility down to  $-200^{\circ}\text{C}$ . The gloves are also very useful for other work in cold environments such as in freezers, cold rooms and when handling dry ice.

40 cm in sizes 7, 8, 9 and 10.

55 cm in sizes 7, 8, 9 and 10.

Standards: EN 388, EN 420, EN511, CE 0498.

For technical information see separate product datasheet from CRYOKIT.

### Cryo-kit



Cryo-kit bag with protection equipment.

A practical, easy-to-carry bag that contains:

- 1 pair of Cryogenic glove, 40 cm, size 10. (Contact Customer Service Center when ordering if another size is needed)
- 1 Cryogenic apron size 70x90 cm
- 1 face shield, Clear-Cryo (CE 0068)
- 1 pair of Cryogenic shoe protection, Ghetto-Cryo (CE 0302)\*

For technical information see separate product datasheet from CRYOKIT.

\*Cryogenic shoe protection, Ghetto-Cryo is available for purchase separately.

## Oxygen alarm

Gas tracing is an important measure to control and minimizing the risks for personnel working with liquid nitrogen. To support the daily safety work, Linde Healthcare has selected a portable and a fixed oxygen alarm of high quality.

### Fixed oxygen alarm



S210



S185

A fixed oxygen alarm must be installed in areas with gas related risks, for example in a cryo-storage room and where filling of LIN and LIN supply takes place. If the oxygen level in the room drops, an alarm is activated with both an audible signal and a symbol. The alarm is clearly visible and audible on the main unit and on a unit located outside the room to prevent anyone from entering a room with a dangerously low oxygen level. The alarm can communicate with a hospital's central operating system via analogue signals 4–20 mA or digital signals via potential-free contacts (included as standard). The oxygen sensor in the alarm has a life span of up to five years.

Linde Healthcare is the distributor of a fixed alarm manufactured by Sintesy. For technical information and other versions see separate product datasheet from Sintesy.

### Portable oxygen alarm



A portable oxygen alarm is used as personal protection for personnel handling liquid nitrogen. Linde Healthcare is the distributor for a portable alarm manufactured by Crowcon, Crowcon Clip SGD. The alarm weighs only 104 g, is very durable, reliable and easy to use. Crowcon Clip SGD alarms immediately at a low oxygen level.

For technical information see separate product datasheet from Crowcon.

## Article numbers

Description	Article number
Bionic face shield (Honeywell)	329478
Cryogenic apron, 70x90 cm	339432
Cryogenic apron, 70x110 cm	339433
Cryogenic apron, 70x120 cm	339434
Cryogenic apron, 70x135 cm	339436
Cryogenic glove, 40 cm, size 7	338994
Cryogenic glove, 40 cm, size 8	338995
Cryogenic glove, 40 cm, size 9	338996
Cryogenic glove, 40 cm, size 10	338997
Cryogenic glove, 55 cm, size 7	340220
Cryogenic glove, 55 cm, size 8	338998
Cryogenic glove, 55 cm, size 9	338999
Cryogenic glove, 55 cm, size 10	339000
Cryogenic shoe protection, male size	340140
Cryogenic shoe protection, female size	340141
Cryo-kit bag	339437
Sintesy S210, v01	336012
Sintesy S185, v01	336023
Crowcon Clip SGD, portable oxygen alarm	336424

## Contact us

Contact us for more information about our safety products and our selection of trainings on safe handling of gases.

## Customer Service Center

For ordering and more information contact Linde Healthcare customer service center:  
Phone +46-8-731 18 00  
healthcare.se@linde.com

Linde Gas AB

Linde Healthcare, Rättarvägen 3, 169 68 Solna, Sweden  
Phone +46 8 731 10 00, www.linde-healthcare.se