



## **Frosters Gloves and Gauntlets For Ultra-Cold**

- For use with materials stored with liquid nitrogen and in other very cold environments
- · Superb insulation needs less thickness giving more dexterity
- Synthetic fibre outer for flexibility
- Water resistant
- · Four hand sizes and three lengths, all extending over wrist
- Competitively priced

Scilabub's Frosters Gloves have been specially developed for the handling of very cold objects. Typically they are used for handling objects stored in the vapour phase of liquid nitrogen (ranging from -120°C to -190°C). At actual liquid nitrogen temperature there is some stiffening of the material, but it still remains flexible enough for use. The gloves should not be immersed in liquid nitrogen. They are also very useful for other cold situations such as with freezers, cold rooms, 'dry ice' and microtomes.

Frosters are long gloves which extend well over the wrist and are cut so that fingers and thumbs retain a high degree of movement. The outer layer, of royal blue, woven, polyamide, has a waterproof coating to resist condensed water on cold surfaces. Yet it remains permeable to water vapour so that there is no clammy condensation inside. However, it should be noted that the stitch holes are not sealed (to reduce bulk around the fingers) and, whilst this could allow liquid ingress, it has not been found to be a problem in normal use.

The middle layer is of special polyolefin/polyester micro-fibre, which is almost twice as effective in thermal insulation as a similar thickness of down. This minimises heat transfer without being so thick as to be cumbersome. The inner layer is of cotton for comfortable wear.

Frosters are available in a choice of four hand sizes: small  $(7\frac{1}{2}$ " to 8) medium  $(8\frac{1}{2}$ " to 9), large  $(9\frac{1}{2}$ " to 10) and extra large  $(10\frac{1}{2}$ " to 11) and in three lengths: mid-arm(37cm), elbow (50cm) and shoulder (60cm). Each glove has a hanging loop inside the cuff, so that they may be hung in a convenient place, away from pools of condensation, when not in use.



They are made to EN 420 sizes and have been tested to EN388 (2, X, 2, X,) and EN 511-contact cold 2, convective cold 2, Flexibility PASS.







The tests were made on and apply to unwashed gloves. However, the gloves may be hand or machined washed in water at 40°C. Use of biological detergents, detergents containing softeners, fabric conditioners and bleaches should be avoided. Thoroughly rinse and tumble dry or drip dry. If repeated washing diminishes the outer proofing, the gloves may be re-proofed with a proprietary silicone or fluorocarbon spray. Avoid contact with alcohol-based products.

Although Frosters have superb insulation, they are unsuitable for use at high temperatures. However, Scilabub has a complementary range of non-asbestos gloves for use up to 370°C.

The Gloves Carry the following CE Labels:-

Elbow

<€0120	i EN511
6	22X

Mid Arm

Small -GLOMedium -GLOLarge -GLOExtra Large -GLO

GLO/CMS GLO/CMM GLO/CML GLO/CMXL

GLO/CMES GLO/CMEM GLO/CMEL GLO/CMEXL Shoulder

GLO/CMS/EX GLO/CMM/EX GLO/CML/EX GLO/CMXL/EX

## **Frosters Aprons**

Frosters cryogenic aprons offer the same technology and protection as that of the Frosters cryogenic gloves. The apron provides optimum protection for torso and upper legs against the effects of spills and splashes of cryogenic material. The outer layer of waterproof woven polyamide protects, even at the extremely low temperature encountered with liquid nitrogen, and yet is breathable. Thermal insulation is given by a polyolefin/polyester micro-fibre middle layer. The inner layer is of cotton for comfort. Frosters aprons are fitted with quick release clips at both neck and waist and our adjustable straps give a comfortable fit.

Small (900mm length) – APR/CMS Large (1200mm length) – APR/CML Medium (1000mm length) – APR/CMM Extra Large (1400mm length) – APR/CMXL



Nominal apron width is 620mm



Pricing on any accessories shown can be found by keying the part number into the search box on our website. The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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