

# CryoGuard Cryogenic Gloves Specification

**Introduction:** CryoGuard gloves are multi layer insulated gloves designed to provide protection to the hands and arms from the hazards encountered when working with ultra cold or cryogenic materials. They are light weight, flexible, durable, clean, allow for excellent dexterity even at the coldest temperatures, can be worn for extended periods, and are extremely warm.

The CryoGuard line of gloves for cryogenic applications are manufactured in two configurations: Standard Series Water Repellent and 100% Waterproof Series. The Standard Series is recommended for use where the protection requirement is mainly against cold as opposed to protection against splashing or dripping liquid, in which case the Waterproof Series would be recommended.

**Under no circumstances should any of these gloves be submerged directly in liquid nitrogen or used with liquid oxygen. No gloves, including CryoGuard Waterproof Series Gloves, are recommended for immersion in liquid nitrogen.**

All of these gloves are designed to provide protection against the hazards of extreme cold. These gloves should not be confused with work gloves designed for heavy wear.

The CryoGuard gloves were designed to be used in cryogenic temperatures ranging from -85°C to -196°C in areas where cryogenic gases, low temperature freezers, dry ice, cold rooms and cryogenic dewars & auto-fill tanks are in use. Applications for these gloves can be widely found in industries including medical research, biotech, aerospace, food processing, pharmaceutical research & manufacturing, and within clinical hospital laboratories.

**Manufacturing Details:** The sequence of insulating layers is the same for both series of gloves. The insulating fabric utilized is 3M C200 with a temperature preservative parameter of 2.5clo. This consists of three layers: two layers of insulation material are bonded together at the edges of each piece enabling insulating air to be trapped without adding additional weight or bulk and is then complimented with an inner lining that adds insulating value and is specifically designed to wick moisture away from the skin.

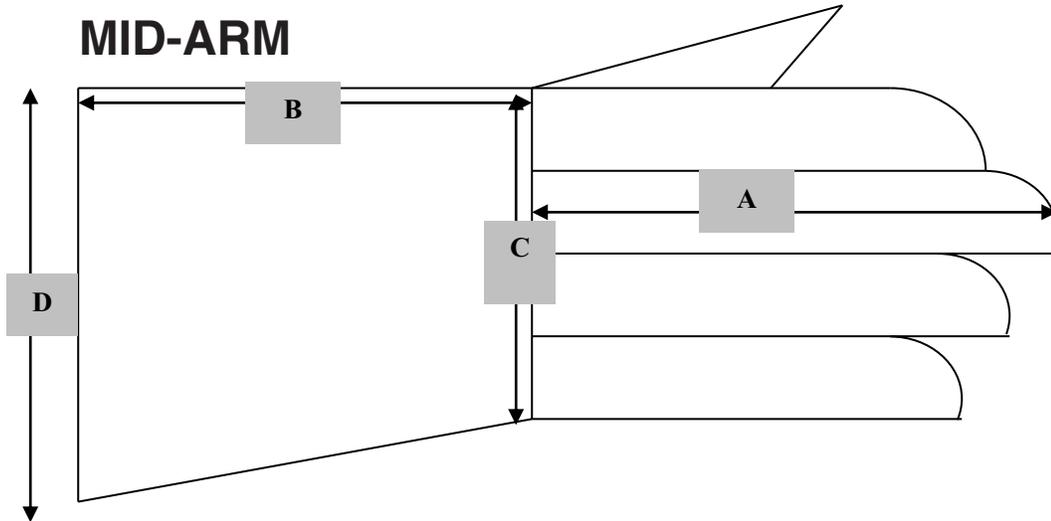
The Waterproof Series gloves incorporate a thin seamless, 100% waterproof inner protective layer. The Wrist style gloves on both Series also incorporates an uninsulated knit cuff.

**Sizing:** The CryoGuard gloves are available in four sizes: Small, Medium, Large and Extra Large. These four sizes correspond to European and American sizes of 8, 9, 10 and 11. They are available in Wrist, Mid-Arm, Elbow and Shoulder lengths.

# GLOVE SIZING CHART

The CryoGuard Cryogenic Gloves are available in two styles, four sizes and four lengths. The two styles of gloves are Standard Water Repellant, Waterproof. The four sizes correspond to European and American sizes of 8, 9, 10 and 11. The four available lengths are Wrist, Mid-Arm, Elbow and Shoulder. Sizing tolerances of gloves are  $\pm 1/4"$ .

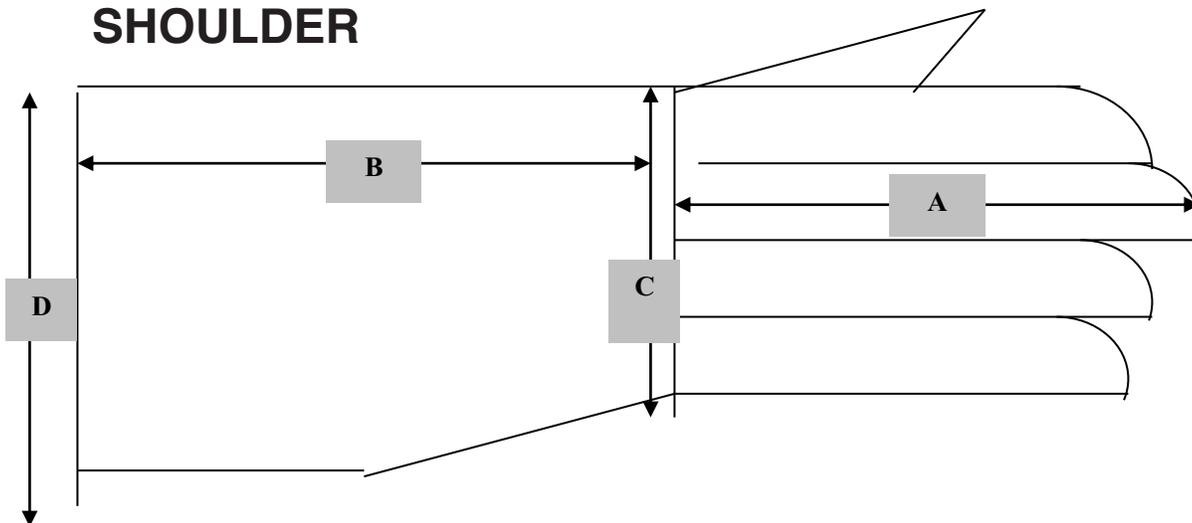
## MID-ARM



	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
XL/11	<b>10"</b>	<b>5.5"</b>	<b>6"</b>	<b>7"</b>
L/10	<b>9.5"</b>	<b>5.5"</b>	<b>5.5"</b>	<b>6.5"</b>
M/9	<b>9"</b>	<b>5"</b>	<b>5"</b>	<b>6"</b>
S/8	<b>8.5"</b>	<b>5"</b>	<b>4.5"</b>	<b>5.5"</b>

*(Tolerance:  $\pm 1/4"$ )*

## SHOULDER

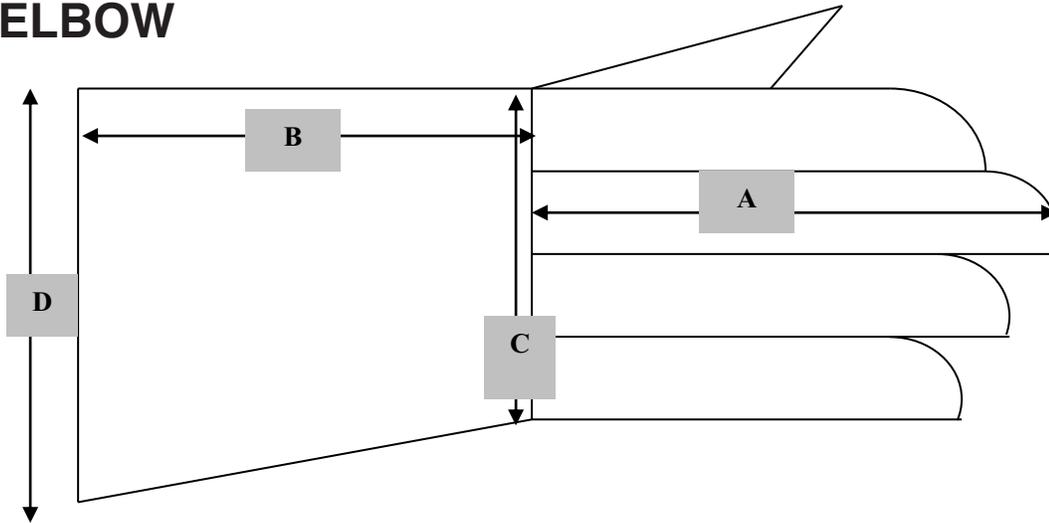


	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
XL/11	<b>10"</b>	<b>17"</b>	<b>6"</b>	<b>9.5"</b>
L/10	<b>9.5"</b>	<b>17"</b>	<b>5.5"</b>	<b>9"</b>
M/9	<b>9"</b>	<b>16.5"</b>	<b>5"</b>	<b>8.5"</b>
S/8	<b>8.5"</b>	<b>16.5"</b>	<b>4.5"</b>	<b>8"</b>

*(Tolerance:  $\pm 1/4"$ )*

# GLOVE SIZING CHART

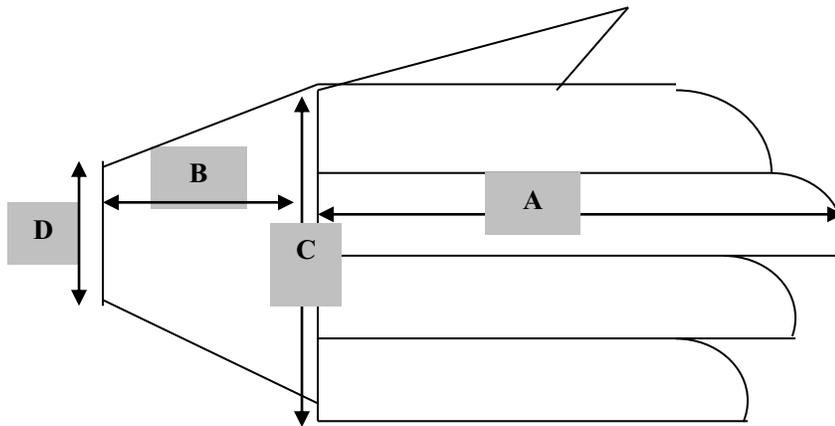
## ELBOW



	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
XL/11	<b>10"</b>	<b>9.5"</b>	<b>6"</b>	<b>8"</b>
L/10	<b>9.5"</b>	<b>9.5"</b>	<b>5.5"</b>	<b>7.5"</b>
M/9	<b>9"</b>	<b>9"</b>	<b>5"</b>	<b>7"</b>
S/8	<b>8.5"</b>	<b>9"</b>	<b>4.5"</b>	<b>6.5"</b>

*(Tolerance: +/- 1/4")*

## WRIST



	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
XL/11	<b>10"</b>	<b>3"</b>	<b>6"</b>	<b>3.5"</b>
L/10	<b>9.5"</b>	<b>3"</b>	<b>5.5"</b>	<b>3"</b>
M/9	<b>9"</b>	<b>2.5"</b>	<b>5"</b>	<b>2.5"</b>
S/8	<b>8.5"</b>	<b>2.5"</b>	<b>4.5"</b>	<b>2"</b>

*(Tolerance: +/- 1/4")*