Glove Use

No glove may be used as protection from all chemicals. A glove may protect against a specific chemical, but it may not protect the wearer from another. If a glove protects the wearer, it will not protect the wearer forever, as the glove material will deteriorate. Therefore, the following must be considered when choosing which gloves to be worn to protect against chemical exposures.

Factors to consider when choosing gloves:

- Chemical to be used: Consult the compatibility charts to ensure that the gloves will protect you.
- Dexterity needed: The thicker the glove, typically the better the chemical protection, as the glove will be more resistant to physical damage, like tears and cracks, but it will harder be to handle and feel the work.
- Extent of the protection required: Determine if a wrist length glove provides adequate protection, or will a glove that extends further up the arm be required.
- Type of work to be done: gloves are specific to the task. Ensure the correct glove is chosen to avoid injuries. Examples: A nylon cryogenic glove will be damaged if a hot item is handled, where as a "hot mitt" will not protect the wearer when liquid nitrogen is used, as it may be too porous.

Glove Compatibility Charts

The following are links to various companies providing gloves that may be used at the UK. Available on each site are the glove compatibility or chemical resistance charts for those gloves supplied by those companies. Please use these charts to ensure the gloves being used to handle chemicals are providing adequate protection to the wearer. It is important to note that all chemicals will not be listed on these charts. It is also essential to note that two similar gloves supplied by two separate manufacturers may not provide the same level of protection to a specific chemical. Therefore, it will necessary to consult the manufacturer's specific compatibility chart for the brand of gloves being used.

Understanding terms used in glove compatibility charts:

- Breakthrough time: Time it takes for the chemical to travel through the glove material. This is only recorded at the detectable level on the inside surface of the glove.
- Permeation Rate: Time it takes for the chemical to pass through the glove once breakthrough has occurred. This involves the absorption of the chemical into the glove material, migration of the chemical through the material, and then deabsorption once it is inside the glove.
- Degradation rating: This is the physical change that will happen to the glove material as it is affected by the chemical. This includes, but is not limited to swelling, shrinking, hardening, cracking, etc. of the glove material.

Compatibility charts rating systems will vary by the manufacturer's design of their chart. Many use a color code, where red = bad, yellow = not recommended, green = good, or some variation this scheme. A letter code may be used, such as E + excellent, G = Good, P = poor, NR = Not Recommended. Any combination of these schemes may be used, so please understand the chart before making a decision on the glove to be used.

