Glove use in laboratories

The following must be considered when choosing which gloves to be worn to protect against chemical exposures:

1. **Chemical to be used**: Consult the compatibility charts to ensure that the gloves will protect you.

2. **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.

3. **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.

4. **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, whereas a “hot mitt” will not protect the wearer when liquid nitrogen is used, as it may be too porous.
Rules for glove use in the labs

1. Wear the correct gloves when needed.

1. Wash hands once gloves have been removed.

1. Disposable gloves must be discarded once removed. Do not save for future use.

1. Non-disposable/reusable gloves must be washed and dried, as needed, and then inspected for tears and holes prior to reuse.

1. Remove gloves before touching personal items, such as phones, computers, pens and one’s skin.

2. Do not wear gloves out of the lab. If gloves are needed to transport anything, wear one glove to handle the transported item: one glove rule

3. If for any reason a glove fails, and chemicals come into contact with skin, consider it an exposure and seek medical attention.

http://www.ehs.ufl.edu/programs/lab/chp/gloves/
Glove compatibility charts

**Breakthrough time:** Time it takes for the chemical to travel through the glove material.

**Permeation Rate:** Time it takes for the chemical to pass through the glove once breakthrough has occurred (absorption, migration, deabsorption)

**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.