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, where as 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.

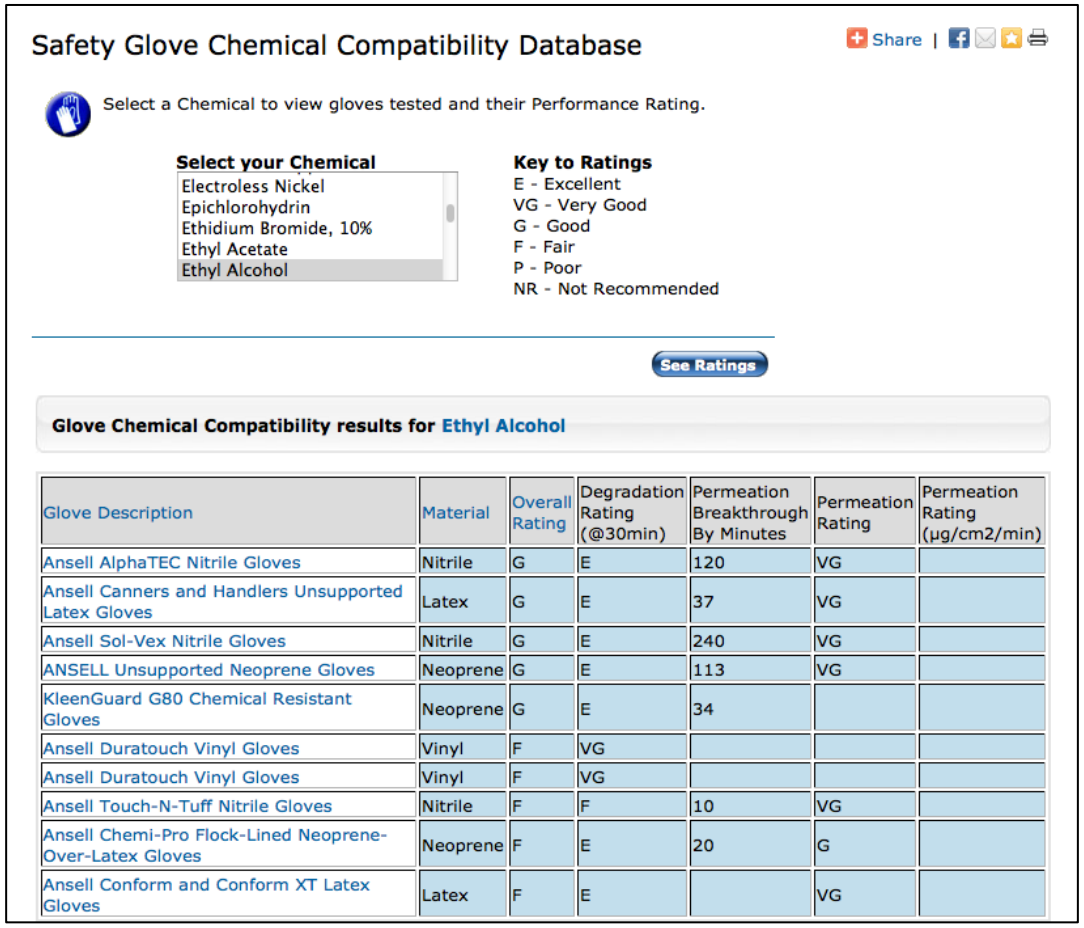
1. Remove gloves before touching personal items, such as phones, computers, pens and one's skin.

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



Safety Glove Chemical Compatibility Database

Share

Select a Chemical to view gloves tested and their Performance Rating.

Select your Chemical

Electroless Nickel
Epichlorohydrin
Ethidium Bromide, 10%
Ethyl Acetate
Ethyl Alcohol

Key to Ratings

E - Excellent
VG - Very Good
G - Good
F - Fair
P - Poor
NR - Not Recommended

See Ratings

Glove Chemical Compatibility results for Ethyl Alcohol

Glove Description	Material	Overall Rating	Degradation Rating (@30min)	Permeation Breakthrough By Minutes	Permeation Rating	Permeation Rating (µg/cm2/min)
Ansell AlphaTEC Nitrile Gloves	Nitrile	G	E	120	VG	
Ansell Canners and Handlers Unsupported Latex Gloves	Latex	G	E	37	VG	
Ansell Sol-Vex Nitrile Gloves	Nitrile	G	E	240	VG	
ANSELL Unsupported Neoprene Gloves	Neoprene	G	E	113	VG	
KleenGuard G80 Chemical Resistant Gloves	Neoprene	G	E	34		
Ansell Duratouch Vinyl Gloves	Vinyl	F	VG			
Ansell Duratouch Vinyl Gloves	Vinyl	F	VG			
Ansell Touch-N-Tuff Nitrile Gloves	Nitrile	F	F	10	VG	
Ansell Chemi-Pro Flock-Lined Neoprene-Over-Latex Gloves	Neoprene	F	E	20	G	
Ansell Conform and Conform XT Latex Gloves	Latex	F	E		VG	

http://www.coleparmer.com/SafetyChemGuide

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.