

Protective Glove Guidelines

The purpose of this document is to establish guidelines on the appropriate selection and use of gloves for personal protection, and to prevent the spread of contaminants to communal areas. This guideline is specifically targeting all personnel using, handling, and storing hazardous chemicals. Gloves are recognized as universal and appropriate protective gear. Upon leaving a laboratory area, gloves must be removed and discarded, unless adhering to the [One Glove Rule](#). Gloves contaminated with chemicals should be deposited in an appropriate hazardous waste container. Gloves should be removed before handling doorknobs, elevator buttons, water fountains, handrails, computer keyboards, or fixtures that are generally expected to be free of chemical contamination.

Choosing Protective Gloves:

- Chemical involvement:

Prior to selecting the type of protective gloves that your lab will be purchasing, please ensure chemical compatibility & protection by consulting with the glove manufacturer. This will maintain the best glove protection for the specific chemical types of potential exposure.

- Range of glove protection required:

Also consult with Principal Investigator and Lab Managers about the type of protective glove that would work best with the academic or research experiment and laboratory chemicals involved. (i.e., wrist length gloves, elbow length gloves, thickness, dexterity, protection, comfort, and allergies.)

Type of gloves: The type of glove to be used during an experiment is dependent on the type of lab procedures & processes taking place. Glove selection begins with a review of the "Glove Type and Chemical Use" chart Appendix C in the FIU Chemical Hygiene Plan.

**Limited Service* *VG = Very Good* *G = Good* *F = Fair* *P = Poor (Not Recommended)*

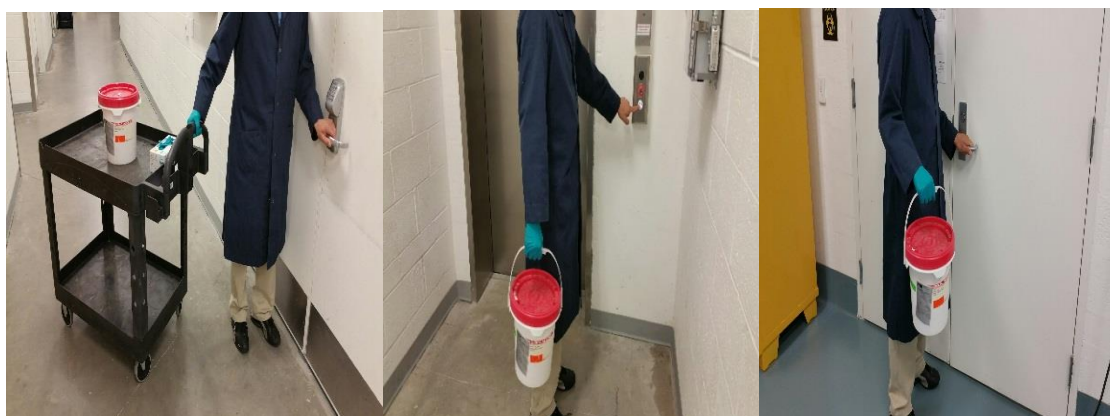
Chemical	Neoprene	Natural Latex or Rubber	Butyl	Nitrile
*Acetaldehyde	VG	G	VG	G
Acetic Acid	VG	VG	VG	VG
*Acetone	G	VG	VG	P
Ammonium hydroxide	VG	VG	VG	VG
*Amyl acetate	F	P	F	P
Aniline	G	F	F	P
*Benzaldehyde	F	F	G	G
*Benzene	F	F	F	P
Butyl acetate	G	F	F	P
Butyl alcohol	VG	VG	VG	VG
Carbon disulfide	F	F	F	F
*Carbon tetrachloride	F	P	P	G
Castor oil	F	P	F	VG
*Chlorobenzene	F	P	F	P
*Chloroform	G	P	P	F
Chloronaphthalene	F	P	F	F
Chromic acid (50%)	F	P	F	F
Citric acid (10%)	VG	VG	VG	VG
Cyclohexanol	G	F	G	VG

Chemical	Neoprene	Natural Latex or Rubber	Butyl	Nitrile
*Dibutyl phthalate	G	P	G	G
Diesel fuel	G	P	P	VG
Diisobutyl ketone	P	F	G	P
Dimethylformamide	F	F	G	G
Diocetyl phthalate	G	P	F	VG
Dioxane	VG	G	G	G
Epoxy resins, dry	VG	VG	VG	VG
*Ethyl acetate	G	F	G	F
Ethyl alcohol	VG	VG	VG	VG
Ethyl ether	VG	G	VG	G
*Ethylene dichloride	F	P	F	P
Ethylene glycol	VG	VG	VG	VG
Formaldehyde	VG	VG	VG	VG
Formic acid	VG	VG	VG	VG
*Furfural	G	G	G	G
Gasoline, leaded	G	P	F	VG
Gasoline, unleaded	G	P	F	VG
Glycerine	VG	VG	VG	VG
Hexane	F	P	P	G
Hydrochloric acid	VG	G	G	G
Hydrofluoric acid (48%)	VG	G	G	G
Hydrogen peroxide (30%)	G	G	G	G
Hydroquinone	G	G	G	F
Isooctane	F	P	P	VG
Isopropyl alcohol	VG	VG	VG	VG
Kerosene	VG	F	F	VG
Ketones	G	VG	VG	P
Lacquer thinners	G	F	F	P
Lactic acid (85%)	VG	VG	VG	VG
Lauric acid (36%)	VG	F	VG	VG
Lineoleic acid	VG	P	F	G
Linseed oil	VG	P	F	VG
Maleic acid	VG	VG	VG	VG
Methyl alcohol	VG	VG	VG	VG
Methylamine	F	F	G	G
Methyl bromide	G	F	G	F
*Methyl chloride	P	P	P	P
*Methyl ethyl ketone	G	G	VG	P
*Methyl isobutyl ketone	F	F	VG	P
Methyl methacrylate	G	G	VG	F
Monoethanolamine	VG	G	VG	VG
Morpholine	VG	VG	VG	VG
Naphthalene	G	F	F	G
Naphthas, aromatic	G	P	P	G
*Nitric acid	G	F	F	F
Nitromethane (95.5%)	F	P	F	F
Nitropropane (95.5%)	F	P	F	F
Octyl alcohol	VG	VG	VG	VG

Chemical	Neoprene	Natural Latex or Rubber	Butyl	Nitrile
Oleic acid	VG	F	G	VG
Oxalic acid	VG	VG	VG	VG
Palmitic acid	VG	VG	VG	VG
Perchloric acid (60%)	VG	F	G	G
Perchloroethylene	F	P	P	G
Petroleum distillates	G	P	P	VG
Phenol	VG	F	G	F
Phosphoric acid	VG	G	VG	VG
Potassium hydroxide	VG	VG	VG	VG
Propyl acetate	G	F	G	F
Propyl alcohol	VG	VG	VG	VG
Propyl alcohol (iso)	VG	VG	VG	VG
Sodium hydroxide	VG	VG	VG	VG
Styrene	P	P	P	F
Stryene (100%)	P	P	P	F
Sulfuric acid	G	G	G	G
Tannic acid	VG	VG	VG	VG
Tetrahydrofuran	P	F	F	F
*Toluene	F	P	P	F
Toluene diisocyanate	F	G	G	F
*Trichloroethylene	F	F	P	G
Triethanolamine	VG	G	G	VG
Tung oil	VG	P	F	VG
Turpentine	G	F	F	VG
*Xylene	P	P	P	F

One Glove Rule:

- If and when transporting laboratory materials (chemical, biological, radiological) throughout the campus, please have one ungloved hand present to press elevator buttons and open external doors outside of the laboratory.



Protective Glove Use in Laboratories:

- Inspect gloves prior to donning.
- Make sure the appropriate gloves are worn for the appropriate task. (i.e., handling cryogenics, corrosives, and solvents may require different glove types).
- Do not wear the same disposable protective gloves for a long period of time (longer than 2hrs), as they will deteriorate.
- Non-disposable gloves can be used multiple times but must be cleaned between uses and checked for integrity before each use.
- Remove gloves prior to coming in contact with personal items that are in the laboratory.(i.e., bags, phones, pens)
- Prior to leaving the laboratory, gloves should be **removed and discarded**. The “One Glove Rule” should be utilized when transferring chemicals, biologicals or radiological from one lab to the other.
- After removal of gloves, wash hands thoroughly.

Glove Disposal:

- **Wet Gloves**
 - **Gloves that have chemical residue present on them must be placed inside of a solid waste container within the satellite hazardous waste area with a hazardous waste label attached to the container.**
 - Stains on gloves.
 - Liquid residue on gloves.
 - Powder residual on gloves.
- **Dry Gloves**
 - **Gloves that do not contain any stain or residue on them may be thrown in the regular trash bins as they do not pose a safety or environmental threat.**
 - Clean gloves without chemical residues.
 - Gloves that are used to transport lab materials.
 - Damaged gloves that do not have chemical residuals on them.

NOTE: Laboratory coats, safety glasses with side shields, and covered toe shoes are required at all times within FIU laboratories.

Questions? Contact:

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