

Glove Selection and Safety

Gloves are one type of personal protective equipment (PPE) worn to minimize exposure to hazards that could cause serious injuries and illnesses. These injuries and illnesses may result from contact with chemical, biological, or other physical workplace hazards.

Gloves provide protection in many situations, such as:

- Handling chemical and biological materials
- Potential exposure to body fluids
- Cleaning potentially contaminated equipment
- Protection from cuts and punctures
- Handling hot or cold materials, or working in autoclaves, ovens, and freezers (wear insulated gloves)

To be the most effective, gloves must:

1 FIT PROPERLY

One size does **NOT** fit all! Ensure gloves cover all exposed skin (no gap between glove and sleeve).

2 BE MADE WITH THE PROPER MATERIAL(S) FOR THE TASK/HAZARD

Exposure type (splash vs immersion) and length of exposure time must be considered.



When considering which glove you should wear to effectively protect you from a specific type of hazard - **not all gloves are created equal!** Different types of gloves will offer protection from different hazards; no glove material will remain impervious to specific chemicals forever and **no glove is resistant to all chemicals.**

Know the types of hazards you will be working with to ensure you have the proper glove for the job!

Chemical Resistance and Compatibility Guide

Nitrile



Butyl Rubber



Neoprene



Alcohols	OK	Good	Good
Halogenated compounds	OK	Bad	Bad
Aliphatic hydrocarbons	Good	Bad	Good
Aromatic Hydrocarbons	OK	Bad	OK
Strong acids	Bad	Good	Good
Strong bases	Bad	Good	Good
Weak acids	Good	Good	Good

For information on sizes and different types of gloves to order, contact [UR Stores](#)

For more detailed information when choosing the proper glove for a chemical product, refer to Section 8 of its Safety Data Sheet (SDS) through the [ChemWatch](#) database.

Proper Glove Use and Etiquette for Chemical and Biological Protection

- Visually inspect gloves for defects/holes prior to use.
- Donn (put on) and doff (remove) gloves properly to reduce risk of contamination. Refer to [Glove removal technique video](#).



- **Never** touch “clean” items such as computer keyboards, doorknobs, or telephones. Do not leave the work area while wearing gloves; always assume your gloves are “dirty”.
- **Never** reuse disposable gloves! Discard gloves when contaminated and wash hands after removal.

References

[VWR gloves](#)

[VWR glove chemical resistance chart](#)

CSMLS Lab Safety Guidelines, 9th Edition

CCOHS <https://www.ccohs.ca/oshanswers/prevention/ppe/gloves.html>