Glove, Clothing, and Material Chemical Compatibility Resources – Quick Tips

Chemical compatibility must often be considered for many applications. Key factors to consider when choosing chemical resistant gloves, clothing and material are penetration, permeation and degradation.

Penetration is the movement of chemicals through an opening such as through zippers or seams. Permeation is the movement of chemicals through a material on a molecular level. Degradation is an observable or measurable change in a material caused by contact with a chemical.

The internet is a great resource for immediate access to compatibility and other information. The following websites are just some of the many resources where you can find up-to-date chemical compatibility information on gloves, clothing and materials.

Glove Chemical Compatibility Resources

It is always best practice to refer to the specific manufacturers test data for the gloves you are considering.

Ansell Guardian

Ansell Guardian is an interactive program that asks application questions and matches the many styles of Ansell gloves that meet specified chemical compatibility and application needs.

MCR Safety

MCR Safety offers a glove permeation guide for several of their supported and unsupported gloves. The chemical permeation is measured in accordance to European Standard EN374.

Showa

View detailed chemical compatibility information by using this comprehensive chemical-resistant glove guide –ChemRest®. This guide contains thousands of chemicals and suggests matches to more than 60

styles of Showa gloves.

MAPA Professional

MAPA Professional's website has an easy-to-use chemical resistance guide that allows you to search by chemical, CAS number, glove name or glove material.

Kimberly-Clark Professional

Kimberly-Clark Professional provides a product selector guide for all safety products they produce that includes hand protection.

Condor

Grainger offers a line of private labeled PVC and Nitrile Chemical-Resistant Gloves.

- **PVC:** https://www.grainger.com/ec/pdf/Condor-PVC-Gloves-Chemical-Compatibility-Guide-R.pdf
- **Nitrile:** https://www.grainger.com/ec/pdf/2YEJ9_1.pdf

Clothing Chemical Compatibility Resources

Several chemical protective clothing manufacturers offer interactive databases that provide permeation data for hundreds of chemicals, including chemical warfare agents and the ASTM F1001 standard list of challenge chemicals. These manufacturers include:

- **DuPont Apparel**
- **Kappler Apparel**
- **Kimberly Clark**

Material Chemical Compatibility Resources
General chemical resistance information on resins, plastics and tubing is available from:

- **Nalge Nunc International**
- **Saint-Gobain Performance Plastics**
- **Cole-Parmer** https://www.coleparmer.com/Chemical-Resistance

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