Glove Selection Flowchart

Start

Identify the Hazard

Base selection of glove type and material on the type of exposure and nature of the hazard.

Hazard Type

- ***Chemical***
- ***Biological***
- ***Toxicity***

Read the *Safety Data Sheet* - section 8

Type of contact

Incidental Contact

- *Accidental spills or splashes*
- *Accidental overspray from a dispensing device*
- *Handling infectious agents that require barrier protection*
- *To prevent contamination of materials during handling.*

Guidelines

- *Disposable gloves (surgical type) are appropriate*
- *They come in various thicknesses*
- *Check for rips or punctures before use*
- *Never wash or reuse disposable gloves*
- *Remove/replace gloves immediately when a chemical spills or splashes on them*

Latex gloves ***Are not recommended for use with chemicals***

Nitrile (disposable)

- *Excellent general use glove.*
- *Most recommended glove.*

Vinyl, neoprene, mixed materials gloves

- *other materials might be recommended by the SDS or might be available*
- *check the manufacturer's compatibility charts before use*

Extended Contact

- *Handling highly contaminated materials*
- *Submerging hands in a chemical or other hazardous substance*

Guidelines

- *Thicker, re-usable gloves are appropriate*
- *Check the glove for signs of degradation (change in color or texture)*
- *Wash after removal and air dry in the laboratory (some models)*
- *Inner surgical gloves can be used for extra protection*

Butyl rubber

- *Good for ketones and esters.*
- *Poor for gasoline and aliphatic, aromatic, and halogenated hydrocarbons.*

Nitrile (thick)

Excellent general use glove. Good for solvents, oils, greases, and some acids and bases.

Neoprene

- *Good for most hazardous chemicals*
- *Poor for halogenated and aromatic hydrocarbons.*

Polyvinyl Chloride (PVC)

- *Good for acids, bases, oils, fats, peroxides and amines*
- *Poor for most organic solvents*

Polyvinyl Alcohol (PVA)

- *Good for aromatic and chlorinated solvents*
- *Poor for water-based solutions*

- ***Physical***
- ***Temperature extremes***

Use glove appropriate for the type or work. See examples below:

Cryogenic gloves

For work with cryogens or very cold containers and equipment

Cut resistant gloves

- *Stainless steel*
- *Kevlar*
- *Mesh*
- *Leather*

Leather gloves

For handling hot or cold objects

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