Glove Selection Guide

This guide only provides general PPE guidance. Always review the safety data sheet for the chemical(s) being used and the PPE manufacturer’s specifications before selecting appropriate PPE.

<table>
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<tr>
<th>Glove Type</th>
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<th>Use Type</th>
<th>Advantages</th>
<th>Disadvantages</th>
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</table>
| Nitrile, Disposable | ![Nitrile Glove](image) | • Incidental chemical contact use only  
• General lab chemical use  
• Commonly used in the medical field | • Good general lab use glove, adequate protection from many organic solvents, oils, greases, and some acids and bases  
• Good protection from blood, cell lines, and tissue  
• Clear indication of tears and breaks  
• Excellent dexterity  
• Non-allergenic | • Not effective for direct contact use  
• Not effective for use with many halogenated solvents |
| Neoprene, Disposable | ![Neoprene Glove](image) | • Incidental chemical contact use only  
• General lab chemical use | • Good protection from many acids, bases, peroxides, fuels, alcohols, and phenols  
• Clear indication of tears and breaks  
• Excellent dexterity | • Not effective for direct contact use  
• Not effective for use with many halogenated solvents |
| Latex, Disposable   | ![Latex Glove](image) | • Incidental chemical contact use only  
• Commonly used in the medical field  
• Not suitable for many lab settings | • Good protection from many biological agents, including blood, cell lines, and tissue  
• Provides good protection from some acids and bases  
• Excellent dexterity | • Not effective for direct contact use  
• Not effective for use with many organic solvents  
• Allergenic  
• Difficult to detect tears and breaks |
| Butyl Rubber        | ![Butyl Rubber Glove](image) | • Suitable for direct contact with some chemicals | • Good protection from many ketones, esters, gases, vapors, acids, and bases  
• Can be decontaminated reused  
• Puncture and tear resistant | • Not effective for use with gasoline, aliphatic, aromatic, and halogenated hydrocarbons  
• Poor dexterity |
| Viton               | ![Viton Glove](image) | • Suitable for direct contact with some chemicals | • Good protection from many chlorinated and aromatic hydrocarbons  
• Can be decontaminated reused  
• Puncture and tear resistant | • Not effective for use with ketones  
• Average dexterity |
| Polyvinyl Chloride  | ![Polyvinyl Chloride Glove](image) | • Suitable for direct contact with some chemicals | • Good protection from many acids, bases, oils, fats, peroxides, and amines  
• Can be decontaminated reused  
• Puncture and tear resistant | • Not effective for use with many organic solvents  
• Average dexterity |
| General Purpose Nitrile Coated | • Incidental chemical contact use only | • Good all-purpose work glove where very minor chemical contamination is possible; provide minimal chemical resistance | • Not effective for direct and/or prolonged exposure to chemicals |
| Leather | • Non-hazardous material handling; not to be used with chemicals | • Good all-purpose work glove for non-hazardous material handling | • Not effective for use with hazardous chemicals; leather absorbs liquids |
| Cut-Resistant | • Used when handling sharp objects • Incidental chemical contact use only | • Excellent cut resistance to sharp objects such as razor blades and pipette tips • Some provide minimal chemical resistance • Can be decontaminated and reused • Good dexterity and grip | • Not effective for direct and/or prolonged exposure to chemicals |
| Cryogenic Gloves | • Used when handling cryogenic surfaces | • Excellent protection from cryogenic surfaces and liquids such as liquid nitrogen • Designed to be reused for long periods of time | • Not effective for direct and/or prolonged exposure to chemicals • Poor dexterity |
| Heat Resistant Gloves | • Used when handling hot surfaces | • Excellent protection from hot surfaces such as autoclaves and drying ovens • Designed to be reused for long periods of time | • Not effective for use with hazardous chemicals; leather absorbs liquids • Poor dexterity |