

Table 1. Summary of commonly-used fluid-resistant disposable gloves

Glove Material	Advantages	Limitations
<p style="text-align: center;">Latex</p>	<ul style="list-style-type: none"> • Elastic with good tensile strength • Durable while performing routine, low-impact tasks • Tear, abrasion and puncture resistant¹ under routine, low-impact conditions • Good tactile sensitivity • Comfortable with low modulus (resistance to hand movement) • Good for biological and water-based materials 	<ul style="list-style-type: none"> • Limited chemical protection; can be degraded by oils and many organic solvents • Deteriorate with long-term exposure to oxygen, ozone, and UV light • Can induce or exacerbate latex allergies (leading to anaphylaxis in some cases) • Difficult to detect small punctures in glove matrix-may lead to accidental exposures
<p style="text-align: center;">Nitrile</p>	<ul style="list-style-type: none"> • Resistant to a wide range of chemicals including oils, alcohols, aldehydes, and some acids/bases • Durable while performing routine, low-impact tasks • Tear, abrasion and puncture resistant under routine, low-impact conditions • Clear indication of punctures or small breaks • Comfortable • Good alternative for those with latex allergies • Good for biological materials 	<ul style="list-style-type: none"> • Can have a high modulus/ stiffness leading to hand fatigue • Deteriorate with long-term exposure to oxygen, ozone, and UV light • Tactile sensitivity is not as good as for latex gloves, and may be inadequate/poor with thicker gauges
<p style="text-align: center;">Neoprene</p>	<ul style="list-style-type: none"> • Resistant to a wide range of chemicals including oils, alcohols, aldehydes, peroxides and some acids/bases • Durable while performing routine, low-impact tasks • Tear, abrasion and puncture resistant under routine, low-impact conditions 	<ul style="list-style-type: none"> • Poor for aromatic or halogenated hydrocarbons • Can have a high modulus/ stiffness leading to hand fatigue • Deteriorate with long-term exposure to oxygen, ozone, and UV light • Tactile sensitivity is not as good as for latex gloves, and may be inadequate/poor with thicker gauges
<p style="text-align: center;">Vinyl (Polyvinyl Chloride)</p>	<ul style="list-style-type: none"> • Resistant to oils, fats, peroxides, and some acids/bases • Not as prone to deterioration via oxygen/ozone exposure • Abrasion resistant 	<ul style="list-style-type: none"> • Poor durability • Poor elasticity and tensile strength; gloves readily tear or rupture • Poor resistance to many chemicals including alcohols, aldehydes, and many organic solvents • Not form-fitting, increasing risk for exposure to hazards • Not adequate for handling infectious materials

¹Puncture resistance does not include protection from needles, sharp devices, or anything else that focuses pressure across a very small area.