Chemical Resistance Selection Chart for Protective Gloves

The following table from the U.S. Department of Energy (Occupational Safety and Health Technical Reference Manual) rates various gloves as being protective against specific chemicals and will help you select the most appropriate gloves to protect your employees.

The ratings are abbreviated as follows: VG: Very Good; G: Good; F: Fair; P: Poor (not recommended). Chemicals marked with an asterisk (*) are for limited service.

Chemicals	Neoprene	Latex/Rubber	Butyl	Nitrile
Acetaldehyde*	VG	G	VG	G
Acetic acid	VG	VG	VG	VG
Acetone*	G	VG	VG	Р
Ammonium hydroxide	VG	VG	VG	VG
Amy acetate*	F	Р	F	Р
Aniline	G	F	F	Р
Benzaldehyde*	F	F	G	G
Benzene*	Р	Р	Р	F
Butyl acetate	G	F	F	Р
Butyl alcohol	VG	VG	VG	VG
Carbon disulfide	F	F	F	F
Carbon tetrachloride*	F	Р	Р	G
Castor oil	F	Р	F	VG
Chlorobenzene*	F	Р	F	Р
Chloroform*	G	Р	P	F

Chloronaphthalene	F	Р	F	F
Chromic acid (50%)	F	Р	F	F
Citric acid (10%)	VG	VG	VG	VG
Cyclohexanol	G	F	G	VG
Dibutyl phthalate*	G	Р	G	G
Diesel fuel	G	Р	Р	VG
Diisobutyl ketone	Р	F	G	Р
Dimethylformamide	F	F	G	G
Dioctyl phthalate	G	Р	F	VG
Dioxane	VG	G	G	G
Epoxy resins, dry	VG	VG	VG	VG
Ethyl acetate*	G	F	G	F
Ethyl alcohol	VG	VG	VG	VG
Ethyl ether*	VG	G	VG	G
Ethylene dichloride*	F	Р	F	Р
Ethylene glycol	VG	VG	VG	VG
Formaldehyde	VG	VG	VG	VG
Formic acid	VG	VG	VG	VG
Freon 11	G	Р	F	G
Freon 12	G	Р	F	G

Freon 21	G	Р	F	G
Freon 22	G	Р	F	G
Furfural*	G	G	G	G
Gasoline, leaded	G	Р	F	VG
Gasoline, unleaded	G	Р	F	VG
Glycerin	VG	VG	VG	VG
Hexane	F	Р	Р	G
Hydrazine (65%)	F	G	G	G
Hydrochloric acid	VG	G	G	G
Hydrofluoric acid (48%)	VG	G	G	G
Hydrogen peroxide (30%)	G	G	G	G
Hydroquinone	G	G	G	F
Isooctane	F	Р	Р	VG
Kerosene	VG	F	F	VG
Ketones	G	VG	VG	Р
Lacquer thinners	G	F	F	Р
Lactic acid (85%)	VG	VG	VG	VG
Lauric acid (36%)	VG	F	VG	VG
Lineolic acid	VG	Р	F	G
Linseed oil	VG	Р	F	VG

Maleic acid	VG	VG	VG	VG
Methyl alcohol	VG	VG	VG	VG
Methylamine	F	F	G	G
Methyl bromide	G	F	G	F
Methyl chloride*	Р	Р	Р	Р
Methyl ethyl ketone*	G	G	VG	Р
Methyl isobutyl ketone*	F	F	VG	Р
Methyl metharcrylate	G	G	VG	F
Monoethanolamine	VG	G	VG	VG
Morpholine	VG	VG	VG	G
Naphthalene	G	F	F	G
Napthas, aliphatic	VG	F	F	VG
Napthas, aromatic	G	Р	Р	G
Nitric acid*	G	F	F	F
Nitric acid, red and white fuming	Р	Р	Р	Р
Nitromethane (95.5%)*	F	Р	F	F
Nitropropane (95.5%)	F	Р	F	F
Octyl alcohol	VG	VG	VG	VG

Oleic acid	VG	F	G	VG
Oxalic acid	VG	VG	VG	VG
Palmitic acid	VG	VG	VG	VG
Perchloric acid (60%)	VG	F	G	G
Perchloroethylene	F	Р	Р	G
Petroleum distillates (naphtha)	G	Р	Р	VG
Phenol	VG	F	G	F
Phosphoric acid	VG	G	VG	VG
Potassium hydroxide	VG	VG	VG	VG
Propyl acetate	G	F	G	F
Propyl alcohol	VG	VG	VG	VG
Propyl alcohol (iso)	VG	VG	VG	VG
Sodium hydroxide	VG	VG	VG	VG
Styrene	Р	Р	Р	F
Styrene (100%)	Р	Р	Р	F
Sulfuric acid	G	G	G	G
Tannic acid (65)	VG	VG	VG	VG
Tetrahydrofuran	Р	F	F	F
Toluene*	F	Р	Р	F

Toluene diisocyanate (TDI)	F	G	G	F
Trichloroethylene*	F	F	Р	G
Triethanolamine (85%)	VG	G	G	VG
Tung oil	VG	Р	F	VG
Turpentine	G	F	F	VG
Xylene*	Р	Р	Р	F
Note: When selecting chemical-resistant gloves be sure to consult the manufacturer's recommendations, especially if the gloved hand(s) will be immersed in the chemical.				