Resistance To Chemicals of Common Glove Materials

Chemical	Natural	Neoprene Rubber	Nitrile	Vinyl
Acetaldehyde	**G**	**G**	**E**	**G**
Acetic Acid	**E**	**E**	**E**	**E**
Acetone	**G**	**G**	**G**	**F**
Acrylonitrile	**P**	**G**	**--**	**F**
Ammonium Hydroxide (sat)	**G**	**E**	**E**	**E**
Aniline	**F**	**G**	**E**	**G**
Benzaldehyde	**F**	**F**	**E**	**G**
Benzene^a	**P**	**F**	**G**	**F**
Benzyl Chloride^a	**F**	**P**	**G**	**P**
Bromine	**G**	**G**	**--**	**G**
Butane	**P**	**E**	**--**	**P**
Butyarldehyde	**P**	**G**	**--**	**G**
Calcium Hypochlorite	**P**	**G**	**G**	**G**
Carbon Disulfide	**P**	**P**	**G**	**F**
Carbon Tetrachloride^a	**P**	**F**	**G**	**F**
Chlorine	**G**	**G**	**--**	**G**
Chloroacetone	**F**	**E**	**--**	**P**
Chloroform^a	**P**	**F**	**G**	**P**
Chromic Acid	**P**	**F**	**F**	**E**
Cyclohexane	**F**	**E**	**--**	**P**
Dibensyl Ether	**F**	**G**	**--**	**P**
Dibutyl Phtalate	**F**	**G**	**--**	**P**
Diethanolamine	**F**	**E**	**--**	**E**
Diethyl Ether	**F**	**G**	**E**	**P**
Dimethyl Sulfoxide^b	**--**	**--**	**--**	**--**
Ethyl acetate	**F**	**G**	**G**	**F**
Ethylene Dichloride^a	**P**	**F**	**G**	**P**
Ethylene Glycol	**G**	**G**	**E**	**E**
Ethylene Trichloride^a	**P**	**P**	**--**	**P**
Fluorine	**G**	**G**	**--**	**G**
Formaldehyde	**G**	**E**	**E**	**E**
Formic Acid	**G**	**E**	**E**	**E**
Glycerol	**G**	**G**	**E**	**E**
Hexane	**P**	**E**	**--**	**P**
Hydrobromic Acid (40%)	**G**	**E**	**--**	**E**
Hydrochloric acid (conc)	**G**	**G**	**G**	**E**
Hydrofluoric Acid (30%)	**G**	**G**	**G**	**E**
Hydrogen peroxide	**G**	**G**	**G**	**E**
Iodine	**G**	**G**	**--**	**G**
Methylamine	**G**	**G**	**E**	**E**

Resistance to Chemicals of Common Glove Materials

Chemical	Natural	Neoprene Rubber	Nitrile	Vinyl
Methyl Cellosolve	F	E	--	P
Methyl Chloride^a	P	E	--	P
Methyl ethyl ketone	F	G	G	P
Methylene Chloride^a	F	F	G	F
Monoethanolamine	F	E	--	E
Morpholine	F	E	--	E
Napthalene^a	G	G	E	G
Nitric Acid (conc)	P	P	P	G
Perchloric Acid	F	G	F	E
Phenol	G	E	--	E
Phosphoric Acid	G	E	--	E
Potassium Hydroxide (sat)	G	G	G	E
Proplylene Dichloride^a	P	F	--	P
Sodium Hydroxide	G	F	G	E
Sodium Hypochlorite	G	P	F	G
Sulfuric Acid (conc)	G	G	F	G
Toluene^a	P	F	G	F
Trichloroethylene^a	P	F	G	F
Tricresyl Phosphate	P	F	--	F
Triethanolamine	F	E	E	E
Trinitrotoluene	P	E	--	P

(E= excellent, G= Good, F= Fair, P= Poor)

a Aromatic and halogenated hydrocarbons will attack all types of natural and synthetic glove materials. Should swelling occur, the user should change to fresh gloves and allow the swollen gloves to dry and return to normal.

b No data on the resistance to dimethyl sulfoxide of natural rubber neoprene, nitrile rubber, or vinyl materials are available; the manufacturer of the substance recommends the use of butyl rubber gloves.