CHEMICAL	Butyl Rubber	Chlorinated Polyethylene	Vitron/ Neoprene	Natural Rubber	Neoprene	Nitrile + Polyvinyl Chloride	Nitrile	Polyethylene	Polyvinyl Alcohol	Polyvinyl Chloride	Vitron	Butyl neoprene	Other Materials*
Acetaldehyde	RR	NN		NN	NN	NN	NN	NN	nn	NN	NN		Yes
Acetic acid, glacial	R	rr		nn	RR	NN	RR	nn	n	NN	rr		Yes
Acetone	RR	NN		NN	NN	nn	NN	NN	NN	NN	NN		Yes
Acetonitrile	RR	rr	nn	NN	NN		NN	NN	rr	NN	rr	rr	Yes
Ammonium hydroxide	R	r		rr	rr	NN	rr	NN	n	NN	r		Yes
Amyl alcohol	rr		r	NN	RR	NN	nn	nn	rr	NN	rr	r	Yes
Aniline	RR	r	rr	NN	NN	NN	nn	NN	RR	NN	NN	rr	Yes
Benzaldehyde	rr	n	n	nn	nn	n	nn	NN	RR	N	n	r	Yes
Benzene	NN	nn	rr	NN	NN	NN	NN	NN	NN	NN	nn	rr	Yes
Butyl acetate	rr	r		NN	NN	nn	NN	NN	rr	NN	nn		Yes
Butyl alcohol	R	r		nn	RR	nn	RR	RR	nn	nn	r		Yes
Butane	n			N	R	r	n			N	r		Yes
Butyraldehyde	nn		n	R	nn	r	r		nn	R	nn	r	Yes
Calcium hypochlorite	r			R	R	r	r			R			Yes
Carbon disulfide	NN	NN		N	N	n	NN	NN	RR	N	RR		Yes
Carbon Tetrachloride	N	nn	r	NN	NN	NN	N	NN	RR	NN	rr	n	Yes
Chloroacetone		r		n	n	R	n			N		r	Yes
Chloroform	N	NN	r	NN	NN	n	NN	NN	RR	NN	rr	n	Yes
Chromic acid	n	r		NN	N	RR	N	rr		RR	r		Yes
Cyclohexane	N	r	r	NN	NN	n	RR	NN	nn	NN	RR	n	Yes
Dibenzyl ether	r		n	N	R	r	r			R		r	Yes
Diethanolamine	rr			n	rr	n	nn			r	rr		Yes
Diethyl ether	NN	r	n	NN	NN	nn	NN	NN	RR	nn	NN	n	Yes
Dimethyl sulfoxide		rr		RR	RR	rr	nn	rr		NN			Yes
Ethyl acetate	n	nn	n	NN	NN	nn	NN	NN	n	nn	n	n	Yes
Ethyl alcohol									rr				Yes
Ethylene glycol	R	r	r	RR	rr	RR	RR	RR	rr	nn	r	r	Yes
Ethylene trichloride	NN	nn		NN	NN	NN	NN	NN	NN	NN	NN	n	Yes
Formaldehyde, 37%	RR	rr	r	NN	NN	nn	NN	RR	n	NN	RR	r	Yes
Formic acied, 90%	R	r		R	R	R	r	NN		R	n		Yes
Glycerol	r		r	r	R	r	R			r		r	Yes
Hexane	NN	rr		NN	NN	NN	NN	NN	RR	NN	RR		Yes
Hydrobromic acid	r			r	R	r				R			Yes
Hydrochloric acid, conc.	nn	rr	rr	rr	RR	RR	rr			NN	rr	rr	Yes
Hydrofluoric acid			r	RR	rr	NN	nn	rr	n	nn	r	r	Yes

Hydrogen peroxide	nn	rr	r	r	R	r	n			nn	r	r	Yes
Isobutyl alcohol	rr		r	nn	NN	NN	RR	NN	n	NN	rr	r	Yes
Methylamine	r			nn	rr		rr		n	rr			Yes
Methyl alcohol	rr	rr	rr	NN	NN	nn	NN	nn	NN	NN	nn	rr	Yes
Methyl chloride	n			N	n	n	n	n		N			Yes
Methylene chloride	NN	nn	r	NN	NN	nn	NN	NN	nn	NN	nn	n	Yes
Methyl ethyl ketone		RR	nn	NN	NN	NN	NN	NN	NN	nn	NN	NN	Yes
Naphthalene	N	rr	r	N	nn	NN	rr	NN	rr	NN	r	n	Yes
Nitric acid	n	nn		nn	n	NN	nn	nn	n	NN	rr		Yes
Perchloric acid	r		r	N	rr	rr	rr	rr		rr	r	r	Yes
													Yes
Phenol	R	nn		NN	nn	n	NN	rr	nn	NN	n		Yes
Phosphoric acid, conc	r			rr	rr	rr	rr	rr	n	rr			Yes
Potassium hydroxide	r			R	R	r	R			R	n		Yes
Pyridine	r			NN	NN		NN	rr			n		Yes
Sodium Hydroxide	n	rr		R	R	n	R	rr		rr			Yes
													Yes
Sulfuric acid	n	RR	rr	N	rr	nn	n	rr		NN	rr	rr	Yes
Toluene	NN	r	rr	NN	NN	nn	NN	NN	NN	NN	nn		Yes
Trichloroethylene	NN	nn		NN	NN	NN	NN	NN	NN	NN	nn		Yes
Triethanoiamine	r	r	r	N	R	rr	R	rr		rr	n	r	Yes
Xylene	n	n	r	NN	NN	NN	NN	NN	RR	NN	rr	n	Yes

Source: Guidelines for the selection of Chemical Protective Clothing. 1987. American Conference of Governmental Industrial Hygienists, Inc. Cincinnati, Ohio

Legend

RR= recommended based on strong data
rr=recommended based on data
R=recommended based on judgement
NN= not recommended based on strong data
nn= not recommended based on data
n= not recommended based on judgement

*other materials are recommended. Consult the Source or vendor's glove selection charts.