

Chemical Resistance Table

Materials Tested	
1 EPDM 2 EPR 3 HYPALON® 4 NATURAL RUBBER 5 NITRILE	6 CHLOROPRENE 7 SBR 8 VITON 9 CROSS-LINKED POLYETHYLENE 10 CPE
Key to Results	
EX recommended, little or no effect on tube compound, suitable for continuous service G recommended, minor effect on tube compound, may be suitable for continuous service, suitable for intermittent service C questionable, moderate to severe effect on tube, may be suitable for limited applications X not recommended I no data available, but not expected to perform better than rated compounds <p style="text-align: center;">All results shown are based on room temperature.</p>	

	1	2	3	4	5	6	7	8	9	10
acetaldehyde 50%	G	EX	C	G	X	C	C	X	EX	I
acetic acid, glacial	G	EX	C	G	C	X	G	C	EX	EX
acetic acid 30%	G	EX	G	G	G	EX	G	G	EX	EX
acetic anhydride I	C	G	EX	G	C	G	G	X	EX	EX
acetone	G	EX	G	C	X	C	C	X	EX	EX
acetyl chloride	X	X	X	X	X	X	X	EX	G	EX
acetylene	G	EX	G	G	EX	G	G	EX	EX	I
adipic acid	G	EX	I	EX	EX	EX	EX	I	I	I
aluminum acetate	G	EX	EX	EX	G	G	G	X	EX	EX
aluminum chloride	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
aluminum fluoride	G	EX	EX	G	EX	EX	EX	EX	EX	I
aluminum nitrate	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
aluminum sulfate	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
ammonia anhydrous	G	EX	G	X	G	EX	X	X	EX	EX
ammonia gas (cold)	G	EX	EX	EX	EX	EX	EX	X	EX	I
ammonia gas (hot)	C	G	G	X	X	G	X	X	EX	I
ammonium carbonate	G	EX	I	EX	X	EX	EX	I	EX	I
ammonium chloride	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
ammonium hydroxide	G	EX	EX	X	X	EX	X	G	EX	EX
ammonium nitrate	G	EX	EX	C	EX	EX	G	I	EX	I
ammonium nitrite	G	EX	EX	EX	EX	EX	EX	I	EX	I
ammonium phosphate	G	EX	EX	EX	EX	EX	EX	I	EX	EX
ammonium sulfate	G	EX	EX	EX	EX	EX	EX	I	EX	EX
amyl acetate	X	C	X	X	X	X	X	X	EX	C
amyl alcohol	G	EX	EX	G	G	G	G	G	EX	EX
aniline	G	EX	C	X	X	X	X	C	EX	G
aniline dyes	G	EX	G	G	X	G	G	G	EX	G

aniline hydrochloride	C	G	X	G	G	X	X	G	EX	I
animal fats	C	G	G	X	EX	G	X	EX	EX	EX
aqua regia	X	C	EX	X	X	X	X	G	X	G
arsenic acid	G	EX	EX	G	EX	EX	EX	EX	EX	EX
arsenic trichloride	X	C	I	X	EX	EX	I	I	X	I
asphalt	I	X	G	X	G	G	X	EX	X	I
barium chloride	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
barium sulfate	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
barium sulfide	G	EX	EX	EX	EX	EX	G	EX	EX	EX
beer	G	EX	EX	EX	EX	EX	EX	EX	I	EX
benzene	X	X	X	X	X	X	X	EX	EX	X
benzyl alcohol	G	EX	G	X	X	G	X	EX	EX	I
benzyl benzoate	C	G	X	X	X	X	X	X	EX	I
benzyl chloride	X	X	X	X	X	X	X	EX	EX	X
benzoic acid	X	C	X	X	C	X	X	EX	EX	EX
bordeaux mixture	G	EX	EX	G	G	G	G	EX	EX	I
boric acid	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
brine	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
bromine-anhydrous	X	X	X	X	X	X	X	EX	X	I
bromine trifluoride	X	X	X	X	X	X	X	X	X	I
bromine water	G	G	EX	X	X	X	X	EX	X	I
bromotoluene	X	X	X	X	X	X	X	EX	C	X
bunker oil	X	X	X	X	EX	X	X	EX	EX	I
butadiene	X	C	C	X	X	X	X	EX	EX	I
butane	X	X	G	X	EX	EX	X	EX	EX	G
butter	G	EX	G	X	EX	G	X	EX	EX	G
butyl acetate	X	C	X	X	X	X	X	X	EX	G
butyl alcohol	C	G	EX	EX	EX	EX	EX	EX	EX	EX
butyl amine	G	EX	X	X	C	X	X	X	I	G
butyl benzoate	C	G	X	C	X	X	G	EX	EX	I
butyl cellosolve	G	EX	G	X	C	C	X	X	EX	EX
butyl stearate	X	C	X	X	G	X	X	EX	EX	G
butyraldehyde										
calcium acetate	G	EX	G	EX	G	G	X	X	EX	EX
calcium bisulfite	X	X	EX	X	X	EX	X	EX	EX	EX
calcium chloride	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
calcium hydroxide	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
calcium hypochlorite	G	EX	EX	C	G	C	C	EX	C	EX
calcium nitrate	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
calcium sulfide	G	EX	EX	G	EX	EX	G	EX	EX	EX
carbitol	C	G	G	G	G	G	G	G	EX	EX
carbolic acid (phenol)	C	G	X	X	X	C	X	EX	EX	EX
carbon bisulfide	X	X	X	X	C	X	X	EX	I	C
carbon dioxide	C	G	G	G	EX	G	G	EX	EX	I
carbonic acid	G	EX	EX	EX	G	EX	G	EX	EX	EX
carbon monoxide	G	EX	G	G	EX	G	G	EX	EX	I
carbon tetrachloride	X	X	X	X	C	X	X	fx	EX	X

diethyl sebecate	C	G	G	X	G	X	X	G	EX	G
dihydrogen monoxide	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
diisobutylene	G	EX	X	X	G	X	X	EX	EX	I
diisopropyl benzene	X	X	X	X	X	X	X	EX	EX	I
diisopropyl ketone	G	EX	X	X	X	X	X	X	EX	I
dimethyl formamide	G	EX	X	X	G	C	X	X	EX	I
dimethyl phthalata	G	EX	X	X	X	X	X	G	EX	EX
dinitrotoluene	X	X	X	X	X	X	X	EX	EX	X
dioctyl phthalate	C	G	X	X	C	X	X	G	EX	C
dioctyl sebecate	C	G	X	X	X	X	X	C	G	EX
dipentene	X	X	X	X	G	X	X	EX	EX	G
diphenyl (phenylbenzene)	X	X	X	X	X	X	X	EX	EX	I
dowtherm oil	X	X	X	X	X	X	X	EX	EX	C
dry cleaning fluids	X	X	X	X	C	X	X	EX	I	I
ethane	X	X	G	X	EX	G	X	EX	EX	I
ethanolamine	G	EX	C	G	G	G	G	X	EX	EX
ethyl acetate	G	EX	X	X	X	C	X	X	EX	G
ethyl acetoacetate	G	EX	X	C	X	C	C	X	EX	EX
ethyl alcohol	G	EX	EX	EX	EX	EX	EX	C	EX	EX
ethyl benzene	X	X	X	X	X	X	X	EX	EX	X
ethyl benzoate	G	EX	X	EX	X	X	EX	EX	G	X
ethyl cellulose	C	G	G	G	G	G	G	X	EX	I
ethyl chloride	X	C	X	X	EX	X	X	EX	EX	I
ethyl ether	X	C	X	X	C	C	X	X	EX	EX
ethyl formate	C	G	G	X	X	G	X	EX	EX	EX
ethyl pentochlorobenzene	X	X	X	X	X	X	X	EX	X	X
ethyl silicate	G	EX	G	G	EX	EX	G	EX	EX	EX
ethylene	C	G		C	EX	C	C	EX	I	I
ethylene chloride	X	C	X	X	X	X	X	EX	EX	I
ethylene chlorohydrin	C	G	G	G	X	G	G	EX	EX	I
ethylene diamine	G	EX	G	EX	EX	EX	G	X	EX	G
ethylene dichloride	X	C	X	X	X	X	X	EX	EX	C
ethylene glycol	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
ethylene trichloride	X	C	X	X	X	X	X	EX	EX	I
fatty acids	X	C	G	X	G	G	X	EX	EX	G
ferric chloride	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
ferric nitrate	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
ferric sulfate	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
fish oil	X	X	I	X	EX	X	X	EX	EX	I
fluoroboric acid	G	EX	EX	EX	EX	EX	EX	I	EX	EX
fluorobenzene	X	X	I	X	X	X	X	EX	EX	I
fluorolube	G	EX	EX	G	EX	G	C	C	I	I
fluosilic acid	C	G	EX	G	EX	G	C	EX	G	EX
formidehyde	G	EX	EX	G	C	G	G	X	EX	EX
formic acid	G	EX	EX	G	G	EX	EX	C	G	EX
freon 12	C	G	EX	G	EX	EX	EX	G	EX	EX
freon 13	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX
freon 21	X	X	X	X	EX	X	X	X	EX	X
freon 22	G	EX	EX	G	EX	EX	EX	X	EX	EX

freon 114	G	EX	EX	EX	EX	EX	EX	G	EX	I
fuel oil	X	X	G	X	EX	G	X	EX	EX	EX
furfural	G	EX	C	X	X	C	X	X	EX	EX
gallic acid	G	EX	G	EX	G	G	G	EX	EX	I
gasoline	X	X	C	X	EX	C	X	EX	EX	G
gelatin	G	EX	EX	EX	EX	EX	EX	EX	EX	I
glucose	G	EX	EX	EX	EX	EX	EX	EX	EX	I
glue	G	EX	EX	G	EX	EX	G	EX	EX	I
glycerin	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
glycols	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
green sulfate liquor	G	EX	G	G	G	G	G	EX	EX	G
hexane	X	X	G	X	EX	G	X	EX	G	G
helix alcohol	X	C	G	G	EX	G	G	EX	EX	EX
hydraulic oil (petroleum)	X	X	G	X	EX	G	X	EX	EX	EX
hydrobromic acid	G	EX	EX	EX	X	X	X	EX	EX	EX
hydrobromic acid (hot) 37%	X	C	X	X	X	X	X	G	EX	I
hydrochloric BC d (cold) 37%	G	EX	EX	G	C	G	G	EX	EX	EX
hydrocyanic acid	G	EX	EX	G	G	G	G	EX	C	I
hydrofluoric acid (conc.) hot	G	EX	C	X	X	X	X	C	EX	I
hydrofluoric acid (conc.) cold	G	EX	EX	X	X	X	X	EX	EX	EX
hydrofluoric acid - anhydrous	G	EX	EX	X	X	X	X	X	EX	I
hydrofluosilic acid	C	G	EX	G	EX	G	C	EX	I	EX
hydrogen gas	G	EX	EX	G	EX	EX	EX	EX	EX	EX
iodine	X	X	EX	X	X	X	X	X	EX	EX
isobutyl alcohol	G	EX	EX	EX	G	EX	G	EX	EX	EX
isooctane	X	X	G	X	EX	G	X	EX	EX	G
isopropyl acetate	C	G	X	X	X	X	X	X	EX	I
isopropyl alcohol	G	EX	EX	EX	G	G	G	EX	EX	EX
isopropyl chloride	X	X	X	X	X	X	X	EX	EX	I
isopropyl ether	X	X	C	X	G	C	X	X	EX	I
kerosene	X	X	C	X	EX	G	X	EX	EX	EX
lactic acid (cold)	G	EX	EX	EX	EX	EX	EX	EX	EX	I
lactic acid (hot)	G	EX	EX	X	X	X	X	EX	EX	I
lard	C	G	X	X	EX	G	X	EX	EX	EX
lavender oil	X	X	X	X	G	X	X	EX	G	I
lead acetate	G	EX	X	EX	G	EX	X	X	EX	EX
lead nitrate	G	EX	EX	EX	EX	EX	EX	I	EX	EX
lead sulfamate	G	EX	EX	G	G	EX	G	EX	EX	I
linseed oil	X	C	G	X	EX	G	X	EX	EX	EX
liquefied petroleum gas	X	X	G	X	EX	G	X	EX	EX	G
lubricating oils (petroleum)	X	X	G	X	EX	G	X	EX	EX	EX
lye	G	EX	EX	G	G	G	G	G	I	EX
magnesium chloride	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
magnesium hydroxide	G	EX	EX	G	G	EX	G	EX	EX	EX
magnesium sulfate	G	EX	EX	G	EX	EX	G	EX	EX	EX
maleic acid	G	EX	X	C	X	C	C	EX	G	I
maleic anhydride	C	G	EX	C	X	C	C	X	I	I

malic acid	G	EX	G	C	EX	C	C	EX	I	I
mercury	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
mesityl oxide	C	G	X	X	X	X	X	X	EX	G
methane	X	X	G	X	EX	G	X	G	EX	G
methyl acetate	G	EX	X	C	X	G	C	X	EX	EX
methyl alchohol	G	EX	EX	EX	EX	EX	EX	X	EX	EX
methyl bromide	C	G	X	X	G	X	X	EX	I	I
methyl butyl ketone (propyl acetone)	G	EX	X	X	X	X	X	X	EX	I
methyl cellosolve	C	G	G	X	G	G	X	X	EX	EX
methyl chloride	X	C	X	X	X	X	X	EX	G	X
methyl ethyl ketone (mek)	C	EX	X	X	X	C	X	X	EX	G
methyl isobutyl ketone	C	G	X	X	X	X	X	X	EX	G
methyl oleate	C	G	X	X	X	X	X	G	EX	I
milk	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
mineral oil	X	C	G	X	EX	G	X	EX	EX	EX
monochlorobenzene	X	X	X	X	X	X	X	EX	G	I
monoethanolamine	G	EX	X	G	X	X	G	X	EX	I
monomethylether	X	X	G	X	EX	C	X	EX	I	G
monovinyl acetylene	G	G	G	G	EX	G	G	EX	I	G
naphtha	X	X	X	X	G	C	X	EX	EX	EX
naphthalene	X	X	X	X	X	X	X	EX	EX	EX
napthenic acid	X	X	X	X	G	X	X	EX	EX	EX
natural gas	X	X	EX	G	EX	EX	G	EX	EX	EX
nickel acetate	G	EX	X	EX	G	G	X	X	EX	I
nickel chloride	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
nickel sulfat	G	EX	EX	G	EX	EX	G	EX	EX	EX
nitric acid-conc.	G	EX	G	X	X	X	X	C	G	X
nitric acid-dilute	G	EX	EX	X	X	G	X	EX	EX	EX
nitrobenzene	G	EX	X	X	X	X	X	G	EX	C
nitroethane	C	G	G	G	X	C	G	X	EX	EX
nitromethane	C	G	C	G	X	G	G	X	EX	EX
nitrogen	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
octachlorotuluene	X	X	X	X	X	X	X	EX	I	X
octyl alchol	X	C	G	G	G	EX	G	EX	EX	EX
oleic acid	X	X	C	X	C	C	X	G	EX	EX
oleum	G	EX	G	X	G	C	X	EX	I	I
olive oil	C	G	G	X	EX	G	X	EX	EX	G
o-dichlorobenzene	X	X	X	X	X	X	X	EX	I	X
oxalic acid	G	EX	G	G	G	G	G	EX	EX	EX
oxygen-cold	G	EX	EX	G	G	EX	G	EX	EX	EX
ozone	G	EX	EX	X	X	C	X	EX	EX	EX
palmitic acid	C	G	C	G	EX	G	G	EX	G	EX
peanut oil	X	C	G	X	EX	C	X	EX	EX	EX
perchloric acid	C	G	G	X	X	G	X	EX	EX	I
perchloroethylene	X	X	X	X	G	X	X	EX	EX	X
petroleum	X	X	G	X	EX	G	X	EX	EX	EX
phenol (carbolic acid)	G	EX	G	X	X	C	I	EX	EX	EX
phenylbenzene	X	X	X	X	X	X	X	EX	I	X

phenyl hydrazine	C	G	X	EX	X	X	G	EX	EX	X
phorone	X	C	X	X	X	X	X	X	EX	I
phosphoric acid-20%	G	EX	EX	G	G	G	G	EX	EX	EX
phosphoric acid-80%	G	EX	G	C	X	G	C	EX	EX	EX
phosphorus trichloride	G	EX	X	X	X	X	X	EX	I	X
picric acid	G	EX	G	G	G	EX	G	EX	EX	G
pine oil	X	X	X	X	EX	X	X	EX	EX	EX
polyvinyl acetate emulsion	G	EX	G	G	I	G	X	EX	I	I
potassium acetate	G	EX	EX	EX	G	G	X	X	EX	EX
potassium chloride	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
potassium cupro cyanide	EX	EX	EX	EX	EX	EX	EX	EX	EX	EX
potassium cyanide	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
potassium dichromate	G	EX	EX	G	EX	EX	G	EX	G	EX
potassium hydroxide	G	EX	EX	G	G	G	G	X	EX	EX
potassium nitrate	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
potassium sulfate	G	EX	G	G	EX	EX	EX	EX	EX	EX
propane	X	X	G	X	EX	G	X	EX	EX	G
propyl acetate	C	G	X	X	X	X	X	X	EX	G
propyl alcohol	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
propyl nitrate	G	EX	G	X	X	X	X	X	EX	G
propylene	X	X	X	X	X	X	X	EX	EX	EX
pyranol (transformer oil)	X	X	C	X	EX	G	X	EX	EX	EX
pyridine	G	EX	G	X	X	X	X	X	EX	I
sal ammoniac	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
salicylic acid	G	EX		EX	G	EX	G	EX	EX	EX
salt water	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
sewage	G	G	EX	G	EX	G	G	EX	EX	EX
silicone greases	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
silicone oils	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
silver nitrate	G	EX	EX	EX	G	EX	EX	EX	EX	EX
skydrol 500	G	EX	X	X	X	X	X	X	EX	G
skydrol 7000	G	EX	X	X	X	X	X	G	EX	G
soap solutions	G	EX	EX	G	EX	G	EX	EX	EX	EX
soda ash	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
sodium acetate	G	EX	EX	EX	G	G	X	X	EX	EX
sodium bicarbonate	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
sodium bisulfite	G	EX	EX	EX	EX	EX	G	EX	EX	EX
sodium borate	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
sodium chloride (brine)	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
sodium cyanide	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
sodium hydroxide	G	EX	EX	EX	G	EX	EX	G	EX	EX
sodium hypochlorite	C	G	EX	X	G	EX	X	EX	G	EX
sodium metaphosphate	G	EX	G	EX	EX	G	EX	EX	EX	EX
sodium nitrate	G	EX	EX	G	G	G	EX	I	EX	EX
sodium perborate	G	EX	G	G	G	G	G	EX	EX	I
sodium peroxide	G	EX	G	G	G	G	G	EX	EX	G
sodium phosphate	G	EX	EX	EX	EX	G	EX	EX	EX	EX
sodium silicate	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
sodium sulfate	G	EX	EX	G	EX	EX	G	EX	EX	EX

sodium thiosulfate	G	EX	EX	G	G	EX	G	EX	EX	EX
soybean oil	X	C	C	X	EX	G	X	EX	EX	I
stannic chloride	G	EX	EX	EX	EX	G	EX	EX	EX	EX
steam	G	EX	X	X	X	C	X	X	X	X
stearic acid	G	G	G	G	G	G	G	I	EX	EX
styrene	X	X	X	X	X	X	X	G	G	C
sucrose solution	G	EX	G	EX	EX	G	EX	EX	EX	EX
sulfur	G	EX	EX	X	X	EX	X	EX	EX	I
sulfur chloride	X	X	G	X	C	C	X	EX	EX	I
sulfur dioxide	G	EX	G	G	X	X	G	EX	EX	I
sulfuric trioxide	C	G	X	G	X	X	G	EX	G	X
sulfuric acid 10%	G	EX	EX	C	C	G	C	EX	EX	EX
sulfuric acid 10-75%	G	EX	C	X	X	X	X	EX	EX	X
sulfurous acid	G	EX	EX	G	G	G	G	EX	EX	EX
tannic acid	G	EX	EX	EX	EX	EX	G	EX	EX	EX
tar bituminous	X	C	X	X	G	C	X	EX	I	I
tartaric acid	C	G	EX	C	EX	G	X	EX	EX	EX
terpineol	X	C	X	X	G	X	X	EX	G	EX
tertiary butyl alcohol	C	G	G	G	G	G	G	EX	EX	G
tetrachloroethylene	X	X	X	X	X	X	X	EX	EX	C
tetraethyl lead	X	X	X	X	G	G	X	EX	I	I
toluene	X	X	X	X	X	X	X	EX	EX	C
transformer oil	X	X	C	X	EX	G	X	EX	EX	EX
transmission fluid -A-	X	X	G	X	EX	G	X	EX	EX	EX
trichloroethane	X	X	X	X	X	X	X	EX	EX	C
trichloroacetic acid	C	G	X	C	G	X	C	G	EX	I
trichloroethylene	X	X	X	X	X	X	X	EX	EX	X
tricresyl phosphate	X	X	X	X	X	X	C	EX	EX	EX
triethanol amine	G	EX	G	G	G	EX	G	X	EX	EX
trinitrotoluene	X	X	G	X	X	G	X	EX	EX	G
turbine oil	X	X	X	X	G	X	X	EX	EX	I
turpentine	X	X	X	X	EX	X	X	EX	EX	I
vegetables oils	X	C	G	X	EX	C	X	EX	EX	EX
vinegar	G	EX	EX	G	G	G	G	EX	EX	EX
vinyl chloride	X	X	X	X	X	X	X	EX	EX	C
water	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
whiskey, wines	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
white oil	X	X	X	X	EX	G	X	EX	EX	EX
wood oil	X	X	C	X	EX	G	X	EX	EX	EX
xylene	X	X	X	X	X	X	X	EX	EX	X
zinc chloride	G	EX	EX	EX	EX	EX	EX	EX	EX	EX
zinc sulfate	G	EX	EX	G	EX	EX	G	EX	EX	EX