

Chemical Resistance Information (Tubing Information)

	N	PUR	PE	PVC		N	PUR	PE	PVC		N	PUR	PE	PVC
Acetic Acid, Glacial	-	4	1	4	Ethylene Trichloride	-	4	-	-	Propane	1	3	3	1
Acetic Acid, 30%	-	4	1	4	Ferric Chloride (aq)	-	1	1	1	Propyl Alcohol	-	4	-	-
Acetone	-	4	2	4	Ferric Nitrate (aq)	-	1	2	1	Propylene	-	4	-	-
Acetylene	-	4	1	1						Propylene Oxide	-	4	-	-
Alkazine	-	4	-	-	Ferric Sulfate (aq)	-	1	1	1	Pydraul, 10E, 29 ELT	-	4	-	-
Aluminum Chloride (aq)	-	3	2	1	Fluorine (Liquid)	4	4	3	4	Pydraul, 30E, 50E, 65 E	-	4	-	-
					Formaldehyde (RT)	-	4	2	1					
Aluminum Nitrate (aq)	-	3	-	-	Formic Acid	3	3	2	1	Pydraul, 115E	-	4	-	-
Ammonia Anhydrous	-	4	2	1	Freon 11	-	4	3	1	Pydraul, 230E, 312C, 540C	-	4	-	-
Ammonia Gas (cold)	-	3	-	-	Freon 12	1	1	3	1	Rapeseed Oil	-	2	-	-
Ammonia Gas (hot)	-	4	-	-						Red Oil (MIL-H-5606)	-	1	-	-
Ammonia Chloride (aq)	-	1	1	1	Freon 22	1	4	-	2	RJ-1 (MIL-F-23338 B)	-	1	-	-
Ammonium Sulfate (aq)	-	1	1	1	Fuel Oil	-	2	3	1	RP-1 (MIL-F-25576 C)	-	1	-	-
					Futural Glucose	-	4	1	1					
Amyl Alcohol	-	4	2	1	Glue	-	1	1	3	Salt Water	1	2	1	1
Amyl Naphthalene	-	4	-	-	Glycerin	1	1	1	1	Sewage	-	4	-	-
Animal Fats	-	1	-	-	Glycols	1	4	-	-	Silicate Esters	-	1	-	-
Aqua Regia	-	4	2	3						Silicone Oils	-	1	1	1
Arsenic Acid	-	3	2	1	Green Sulfate Liquor	-	1	-	-	Silver Nitrate	-	1	2	1
Asphalt	-	2	1	1	Hexane	-	2	3	2	Skydrol 500	-	4	-	-
					Hydraulic Oil	-	1	1	1					
ASTM Fuel A	-	2	-	-	Hydrochloric Acid (cold) 37%	-	4	2	2	Skydrol 700	-	4	-	-
ASTM Fuel B	-	3	-	-	Hydrochloric Acid (hot) 37%	-	4	-	-	Soap Solutions	1	3	3	1
ASTM Fuel C	-	3	1	1	Hydrofluoric Acid (Conc.) Cold	-	3	-	-	Sodium Chloride (aq)	1	1	1	1
Barium Chloride (aq)	-	1	1	1						Sodium Hydroxide (aq)	2	4	2	1
Beer	1	2	1	1	Hydrochloric Acid (Conc.) Hot	-	4	-	-	Sodium Peroxide (aq)	-	4	1	2
Beet Sugar Liquors	-	4	1	1	Hydrogen Gas	1	1	1	1	Sodium Phosphate (aq)	-	1	-	-
					Isobutyl Alcohol	-	4	-	-					
Benzene	1	3	3	3	Isocetane	-	2	-	-	Sodium Sulfate (aq)	-	1	1	1
Benzine	-	2	-	-	Isopropyl Acetate	-	4	2	4	Soy Bean Oil	-	2	1	1
Blast Furnace Gas	-	4	-	-	Isopropyl Alcohol	1	3	-	-	Steam Under 300°F	4	4	-	-
Bleach Solutions	-	4	-	1						Steam Over 300°F	4	4	-	-
Borax	-	1	1	2	Isopropyl Ether	-	2	1	2	Stoddard Solvent	-	1	3	3
Boric Acid	-	1	1	1	Kerosene	1	1	3	4	Styrene	-	3	-	4
					Lacquers	-	4	2	3					
Brake Fluid	-	4	-	-	Lacquer Solvents	-	4	2	3	Sucrose Solution	-	4	-	-
Brine	-	2	4	3	Lard	-	1	2	1	Sulfuric Acid (Dilute)	-	3	1	1
Bromine Water	4	4	-	-	Lavender Oil	-	4	-	-	Sulfuric Acid (Conc.)	-	4	3	4
Bunker Oil	-	2	-	-						Sulfuric Acid (20% Oleum)	-	4	-	-
Butane	1	1	3	3	Lead Acetate (aq)	-	4	1	1	Sulfurous Acid	-	3	2	1
Butter	-	1	-	-	Linseed Oil	1	2	3	1	Tannic Acid	-	1	2	1
					Liquid Petroleum Gas	-	-	-	-					
Butyl Alcohol	3	4	1	2	Lubricating Oils	-	2	4	2	Tetrochloroethylene	-	4	2	4
Butylene	-	4	1	1	Lye	-	4	-	-	Toluene	1	4	3	4
Calcium Chloride (aq)	1	1	2	1	Magnesium Chloride (aq)	1	1	1	1	Transformer Oil	-	1	-	-
Calcium Hydroxide (aq)	-	1	2	1						Transmission Fluid Type A	-	1	-	-
Calcium Nitrate (aq)	1	1	-	-	Magnesium Hydroxide (aq)	-	4	1	1	Trichloroethane	3	4	-	3
Calcium Sulfide (aq)	-	1	-	-	Mercury	1	1	1	2	Trichloroethylene	3	4	3	4
					Methane	1	3	-	-					
Cane Sugar Liquors	-	4	-	1	Methyl Acetate	1	4	2	4	Turbine Oil	-	1	3	1
Carbolic Acid	-	3	2	3	Methyl Acrylate	-	4	-	-	Turpentine	1	4	3	2
Carbon Dioxide	-	1	3	1	Methyl Alcohol	1	4	1	1	Varnish	-	3	3	4
Carbon Acid	-	1	2	1						Vinegar	1	4	2	1
Carbon Monoxide	-	1	2	1	Methyl Butyl Ketone	-	4	-	1	Vinyl Chloride	-	4	-	-
Carbon Tetrachloride	3	4	2	2	Methyl Chloride	3	4	3	4					
					Methylene Chloride	-	4	3	4	Water	1	1	1	1
Castor Oil	-	1	-	1	Methyl Ethyl Ketone	1	4	2	4	Whiskey, Wines	1	2	3	1
Chlorine (dry)	4	4	2	1	Methyl Isobutyl Ketone	1	4	-	-	White Oil	-	1	-	-
Chlorine (wet)	4	4	-	-	Milk	1	4	1	1	Wood Oil	-	3	-	-
Chloroform	3	4	3	4						Xylene	2	4	3	4
Chlorox	-	4	-	-	Mineral Oil	1	1	2	1	Zinc Acetate (aq)	-	4	-	-
Chromic Acid	4	4	1	1	Naphtha	1	2	1	3	Zinc Chloride (aq)	1	1	1	1
					Naphthalene	1	2	1	4					
Citric Acid	1	1	1	2	Natural Gas	-	2	-	-					
Coal Tar	-	3	-	-	Neatsfoot Oil	-	1	-	-					
Coconut Oil	-	2	-	1	Nitric Acid (Conc.)	4	4	3	4					
Cod Liver Oil	-	1	-	1										
Coke Oven Gas	-	4	-	-	Nitric Acid (Delute.)	4	3	-	4					
Copper Chloride (aq)	-	1	2	1	Nitroethane	-	4	-	-					
					Nitrogen	-	1	-	-					
Copper Cyanide (aq)	-	1	2	1	N-Octane	-	4	-	-					
Corn Oil	-	1	3	2	Oleic Acid	1	2	3	3					
Cotton Seed Oil	-	1	2	2	Oleum Spirits	-	3	4	4					
Creosol	4	4	3	4										
Cychlohexane	1	1	2	4	Olive Oil	-	1	1	3					
Denatured Alcohol	-	4	-	-	Oxygen-Cold	1	1	-	-					
					Oxygen (200-400°F)	-	4	-	-					
Detergent Solution	-	4	1	1	Paint Thinner, Duco	-	4	-	-					
Diesel Oil	-	3	3	1	Perchloric Acid	-	4	-	-					
Dioxane	-	4	-	-	Perchloroethylene	3	4	4	3					
Dowtherm Oil	-	3	-	-										
Dry Cleaning Fluids	-	4	-	-	Petroleum- Below 250°F	-	2	-	-					
Ethane	-	3	-	4	Petroleum- Above 250°F	4	4	-	-					
					Phenol	4	3	2	3					
Ethyl Acrylate	-	4	-	-	Phenyl Ethyl Ether	-	4	-	-					
Ethyl Alcohol	3	4	-	-	Phosphoric Acid 45%	2	1	2	2					
Ethyl Benzine	-	4	-	-	Pickling Solution	-	4	-	-					
Ethyl Cellulose	-	2	-	-										
Ethyl Chloride	-	2	-	-	Picric Acid	3	2	-	4					
Ethyl Ether	-	3	-	-	Potassium Acetate (aq)	-	4	-	-					
					Potassium Chloride (aq)	-	1	1	1					
Ethylene Chloride	-	4	3	4	Potassium Cyanide (aq)	-	1	1	1					
Ethylene Glycol	2	4	1	1	Potassium Hydroxide (aq)	3	4	1	1					
Ethylene Oxide	1	4	3	3	Producer Gas	-	1	1	1					

Note: the ratings provided are very general guidelines to be referred to only for initial screening purposes. Specific tubing compounds can be positively or negatively affected by varying temperatures, chemical mixtures and/or static vs. dynamic applications. *Careful testing under actual conditions is essential.*

Accuracy for these ratings is not given or implied.

N= Nylon PUR= Polyurethane
PE= Polyethylene
PVC= Polyvinyl Chloride

Ratings:

- 1= Little or no impact
- 2= Minor effect
- 3= Moderate effect
- 4= Severe effect