

General Thermoplastic Chemical Resistance Guide

⚠ Warning! The following data is based on test and believed to be reliable. However, tabulations should be used as a guide only since it does not take into consideration all possible variables. All critical applications should be tested.

Key: E = Excellent • G = Good • C = Conditional • U = Unsatisfactory

Material Handled	PVC		PVC/PU Blend		Rubber Blend		EVA		TPU		Material Handled	PVC		PVC/PU Blend		Rubber Blend		EVA		TPU		
	68	150	68	125	68	150	68	150	68	150		68	150	68	125	68	150	68	150	68	150	
Acetaldehyde	U	U	U	U	C	U	G	U	U	U	Barium Chloride	E	E	E	E	E	E	E	-	E	E	
Acetate Solvents-Pure	U	U	U	U	G	C	C	U	C	U	Barium Hydroxide	E	E	E	E	E	E	E	-	E	E	
Acetic Acid - Glacial	C	U	C	U	U	U	U	U	U	U	Barium Sulfate	E	E	E	E	E	E	E	-	E	E	
Acetic Acid 0-10%	E	G	G	G	E	G	E	E	U	U	Barium Sulfide	E	E	E	E	E	E	E	-	E	E	
Acetic Acid 10-20%	G	C	G	G	G	C	E	G	U	U	Beer	E	C	-	-	-	-	-	-	-	-	
Acetic Acid 20-30 Pct	G	C	G	C	G	C	E	C	U	U	Beet-Sugar Liquor	E	E	-	-	E	E	E	-	-	-	
Acetic Acid 30-60%	G	C	G	C	C	C	C	U	U	U	Benzaldehyde	U	U	U	U	U	U	C	U	U	U	
Acetic Acid 80%	C	C	C	C	U	U	C	U	U	U	Benzene	U	U	C	U	U	U	U	U	U	U	
Acetic Acid Vapors	G	G	G	G	G	C	G	C	U	U	Benzoic Acid	G	C	G	C	G	G	G	-	U	U	
Acetic Anhydride	U	U	U	U	U	U	C	C	U	U	Benzol	U	U	C	U	U	U	U	U	U	C	U
Acetone	U	U	U	U	C	U	C	U	C	U	Bismuth Carbonate	E	E	E	E	E	E	E	-	E	E	
Acetylene	C	C	C	C	U	U	U	U	C	C	Black Liquor (paper industry)	E	E	E	E	E	E	E	-	-	-	
Acrylonitrile	C	U	C	U	-	-	-	-	-	-	Bleach-12.5% Active CL	G	C	G	C	G	C	G	-	C	U	
Adipic Acid	G	C	G	C	G	C	E	G	U	U	Borax	E	E	E	E	E	E	E	-	E	E	
Alcohol (see type)	-	-	-	-	-	-	-	-	-	-	Boric Acid	E	E	E	E	E	E	E	-	G	U	
Allyl Alcohol 96%	U	U	U	U	E	G	E	G	U	U	Boron Trifluoride	E	E	E	E	E	E	E	-	E	E	
Allyl Chloride	U	U	U	U	G	C	C	U	U	U	Brake Fluid	U	U	U	U	-	-	-	-	U	U	
Alum	E	E	E	E	E	E	E	G	E	E	Brine	E	E	E	E	E	E	E	-	G	U	
Aluminum Chloride	E	E	E	E	G	G	G	C	G	G	Bromic Acid	E	C	E	C	G	G	G	-	U	U	
Aluminum Fluoride	G	G	G	G	G	G	G	C	G	C	Bromine - Liquid	U	U	U	U	U	U	U	U	U	U	
Aluminum Hydroxide	E	E	E	E	G	G	G	G	G	C	Bromine - Water	U	U	U	U	U	U	U	U	U	U	
Aluminum Nitrate	E	E	E	E	E	E	E	-	C	C	Butadiene	C	U	C	C	U	U	U	U	-	-	
Aluminum Oxychloride	E	E	E	E	G	G	G	-	-	-	Butane	C	C	C	C	U	U	U	U	-	C	C
Aluminum Sulfate	E	E	E	E	E	E	E	-	G	G	Butanol - Primary	U	U	U	U	E	G	G	-	C	U	
Ammonia - Aqueous	C	U	C	U	G	C	E	-	U	U	Butanol - Secondary	U	U	U	U	E	G	G	-	C	U	
Ammonia - Dry Gas	C	U	C	U	E	E	E	-	U	U	Butter	C	C	-	-	-	-	-	-	-	-	
Ammonia - Liquid	U	U	U	U	G	C	E	U	U	U	Butyl Acetate	U	U	C	U	U	U	U	U	U	C	U
Ammonium Carbonate	E	E	E	E	E	E	E	-	E	E	Butyl Alcohol	C	U	C	C	E	G	E	-	C	U	
Ammonium Chloride	E	E	E	E	E	E	E	-	G	C	Butyl Cellosolve	U	U	U	U	G	C	-	-	-	-	
Ammonium Fluoride 25%	U	U	U	U	G	G	G	-	C	U	Butyl Phenol	C	U	C	U	U	U	U	U	-	-	
Ammonium Hydroxide 28%	C	U	C	U	G	G	E	E	C	U	Butylene	C	C	C	C	U	U	-	-	C	C	
Ammonium Metaphosphate	E	E	E	E	G	G	E	E	G	G	Butyric Acid 20%	C	U	C	U	U	U	U	U	C	U	
Ammonium Nitrate	E	E	E	E	E	E	E	-	G	G	Calcium Bisulfite	E	E	E	E	E	E	E	-	E	E	
Ammonium Persulfate	E	E	E	E	E	E	E	-	G	G	Calcium Chlorate	E	E	E	E	E	E	E	-	G	C	
Ammonium Phosphate	G	G	G	G	G	G	E	-	G	G	Calcium Chloride	E	E	E	E	E	E	E	-	E	G	
Ammonium Phosphate Neutral	E	E	E	E	G	G	E	-	G	G	Calcium Hydroxide	E	E	E	E	E	E	E	-	G	C	
Ammonium Sulfate	E	E	E	E	E	E	E	-	E	E	Calcium Hypochlorite	E	E	E	E	E	E	E	G	-	U	U
Ammonium Sulfide	E	E	E	E	E	E	E	-	E	E	Calcium Nitrate	E	E	E	E	E	E	E	-	E	E	
Ammonium Thiocyanate	E	E	E	E	E	E	E	-	G	G	Calcium Sulfate	E	E	E	E	E	E	E	-	E	E	
Amyl Acetate	U	U	U	U	U	U	U	-	U	U	Cane Sugar Liquors	E	E	-	-	G	G	G	-	-	-	
Amyl Alcohol	C	U	C	U	G	C	G	C	U	U	Carbon Bisulfide	U	U	U	U	U	U	U	U	-	-	
Amyl Chloride	U	U	U	U	U	U	U	-	-	-	Carbon Dioxide (Aqueous Solution)	E	E	E	E	E	E	E	-	E	E	
Aniline	U	U	U	U	U	U	U	U	U	U	Carbon Dioxide Gas (wet)	E	E	E	E	E	E	E	-	E	E	
Aniline Chlorohydrate	U	U	U	U	U	U	U	U	U	U	Carbon Monoxide	E	E	E	E	G	G	G	-	E	E	
Aniline Hydrochloride	U	U	U	U	U	U	U	U	U	U	Carbon Tetrachloride	U	U	C	U	U	U	U	U	U	C	U
Animal Oils	C	U	C	U	U	U	C	U	G	C	Carbonic Acid	C	U	G	G	G	G	G	G	U	U	
Antraquinone	E	E	E	E	E	E	E	-	-	-	Casein	E	C	E	E	E	E	E	-	E	E	
Anthraquinonesulfonic Acid	E	E	E	E	E	E	E	-	U	U	Casto Oil	E	E	E	E	U	U	C	U	E	E	
Antimony Trichloride	E	E	E	E	E	E	E	-	E	E	Catsup	E	G	-	-	-	-	-	-	-	-	
Apple (sauce or juice)	E	E	-	-	-	-	-	-	-	-	Caustic Potash	E	E	E	E	C	C	C	-	C	U	
Aqua Regia	C	U	C	U	U	U	U	U	U	U	Caustic Soda	E	E	E	E	G	C	G	-	C	U	
Aromatic Hydrocarbons	U	U	-	-	-	-	-	-	-	-	Cellosolve	C	U	G	C	G	C	C	U	G	C	
Arsenic Acid 80%	E	G	E	G	E	E	G	-	U	U	Chloroacetic Acid	E	U	E	U	U	U	U	U	U	U	
Arylsulfonic Acid	C	U	C	U	-	-	-	-	U	U	Chloral Hydrate	E	E	E	E	U	U	C	U	G	C	
Asphalt	C	U	C	U	C	U	U	U	G	C	Chloric Acid 20%	E	E	E	E	-	-	-	-	U	U	
ASTM # 1 Oil	C	U	C	U	-	-	-	-	G	G	Chlorinated Hydrocarbons	U	U	U	U	U	U	U	U	U	U	
ASTM # 3 Oil	C	U	C	U	-	-	-	-	G	G	Chlorine Gas (dry)	G	G	G	G	U	U	U	U	U	U	
ASTM Fuel A	C	U	C	U	-	-	-	-	G	G	Chlorine Gas (moist)	C	U	C	C	U	U	U	U	U	U	
ASTM Fuel B	U	U	U	U	-	-	-	-	G	C	Chlorine Water 2%	G	C	G	C	C	U	G	C	C	U	
ASTM Fuel C	U	U	U	U	-	-	-	-	G	C	Chlorine Water Saturated	C	U	C	U	-	-	E	C	-	-	
Barium Carbonate	E	E	E	E	E	E	E	-	E	E												

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	68	150	68	125	68	150	68	150	68	150		68	150	68	125	68	150	68	150	68	150
Chlorobenzene	U	U	U	U	U	U	U	U	U	U	Formic Acid 3%	-	-	-	-	-	-	E	E	-	-
Chloroform	U	U	U	U	U	U	U	U	U	U	Formic Acid 10%	-	-	-	-	-	-	E	E	-	-
Chlorosulfonic Acid	C	U	C	U	U	U	U	U	U	U	Formic Acid 25%	-	-	-	-	-	-	E	E	-	-
Chrome Alum	E	E	E	E	G	G	E	G	E	E	Formic Acid 50%	-	-	-	-	-	-	E	E	-	-
Chromic Acid 10%	G	C	G	C	G	C	G	-	U	U	Formic Acid 100%	-	-	-	-	-	-	U	U	-	-
Chromic Acid 25%	G	C	G	C	G	C	G	-	U	U	Freon-12	C	U	G	C	G	C	G	-	E	E
Chromic Acid 30%	C	U	C	U	C	U	C	U	U	U	Fructose	E	E	-	-	E	E	E	-	E	E
Chromic Acid 40%	C	U	C	U	C	U	C	U	U	U	Fruit Pulps & Juices	E	E	-	-	E	E	E	-	E	E
Chromic Acid 50%	C	U	C	U	C	U	C	U	U	U	Fuel Oil	G	C	G	C	U	U	U	U	U	U
Chromic Acid											Furfural	U	U	U	U	U	U	U	U	U	U
Plating Solution	-	-	-	-	-	-	E	E	U	U	Furfuryl Alcohol	-	-	-	-	-	-	U	U	-	-
Cider	E	C	-	-	-	-	E	C	-	-	Gallic Acid	E	E	E	E	E	E	E	-	-	-
Citric Acid	E	E	E	E	E	E	E	E	U	U	Gas - Coke Oven	G	G	G	G	-	-	-	-	G	G
Coal Tar	U	U	U	U	U	U	U	U	U	U	Gas - Natural (dry)	C	C	C	C	U	U	U	U	C	C
Coconut Oil	G	C	E	G	G	C	C	U	E	E	Gas - Natural (wet)	C	C	C	C	U	U	U	U	C	C
Copper Chloride	E	E	E	E	E	E	E	-	E	E	Gasoline	U	U	U	U	U	U	-	-	E	G
Copper Cyanide	E	E	E	E	E	E	E	-	-	-	Gasoline - Refined	C	U	G	U	C	U	U	U	E	G
Copper Fluoride 2%	E	E	E	E	E	E	E	-	E	E	Gasoline - Sour	C	U	G	U	U	U	U	U	E	G
Copper Nitrate	E	G	E	E	E	G	E	-	E	E	Gelatine	E	E	E	E	E	E	E	-	E	E
Copper Sulfate	E	G	E	E	E	E	E	-	E	E	Glucose	E	E	E	E	E	E	E	-	E	E
Corn Oils	E	G	-	-	-	-	-	-	-	-	Glycerine (glycerol)	E	E	E	E	E	E	E	-	E	E
Cottonseed Oil	G	C	E	E	E	G	E	-	E	E	Glycol	E	E	E	E	E	E	E	-	G	G
Cresote	U	U	U	U	U	U	U	U	-	-	Glycolic Acid 30%	E	E	E	E	E	E	E	-	U	U
Cresol	U	U	-	-	U	U	U	U	C	U	Grease	E	C	E	G	-	-	-	-	E	G
Cresylic Acid 50%	U	U	C	C	U	U	U	U	U	U	Green Liquor (paper industry)	E	E	E	E	E	E	E	-	-	-
Crude Oil - Sour	C	U	C	U	U	U	U	U	E	E	Heptane	C	U	G	U	U	U	U	U	E	-
Crude Oil - Sweet	C	U	C	U	U	U	U	U	E	E	Hexadecanol	-	-	-	-	-	-	U	U	-	-
Cyclohexane	U	U	U	U	C	U	C	U	G	C	Hexane	C	U	C	U	G	C	-	-	-	-
Cyclohexanol	U	U	U	U	C	U	E	C	C	U	Hexanol, Tertiary	C	U	C	U	G	C	C	U	G	-
Cyclohexanone	U	U	U	U	U	U	E	C	U	U	Hydrobromic Acid 20%	E	G	E	G	G	G	G	-	U	U
Demineralized Water	E	E	E	E	E	E	E	E	E	C	Hydrochloric Acid 10%	E	G	E	G	E	E	E	E	U	U
Dextrin	E	E	E	E	E	E	E	-	E	E	Hydrochloric Acid 48%	E	G	E	G	E	G	G	-	U	U
Dextrose	E	G	-	-	E	E	E	-	E	E	Hydrofluoric Acid 4%	G	G	G	G	G	G	E	E	U	U
Di-acetone Alcohol	-	-	-	-	-	-	-	-	-	-	Hydrofluoric Acid 10%	G	C	G	C	G	G	E	E	U	U
Diazo Salts	E	E	E	E	E	G	E	-	-	-	Hydrofluoric Acid 48%	G	U	G	C	G	C	E	E	U	U
Dichlorobenzene	U	U	U	U	-	-	U	U	-	-	Hydrofluoric Acid 60%	G	U	G	U	G	C	E	E	U	U
Diesel Oils	C	U	C	U	-	-	-	-	G	C	Hydrofluorosilicic Acid	G	C	G	C	-	-	-	-	U	U
Diethyl Ether	U	U	U	U	-	-	U	U	G	C	Hydrogen	C	C	C	C	C	C	C	-	C	C
Diethylene Glycol	G	C	G	C	E	C	G	C	U	U	Hydrogen Bromide (dry)	-	-	-	-	-	-	E	E	-	-
Diglycolic Acid	E	G	E	E	E	G	E	-	-	-	Hydrogen Chloride (dry)	-	-	-	-	-	-	E	E	-	-
Di-isodecyl Phthalate	U	U	-	-	-	-	-	-	-	-	Hydrogen Cyanide	C	C	C	C	C	C	C	C	U	U
Dimethylamine	U	U	U	U	U	U	U	U	U	U	Hydrogen Peroxide 3 - 12%	E	G	E	G	G	C	G	C	G	C
Diocetyl Phthalate	U	U	U	U	-	-	G	U	-	-	Hydrogen Peroxide 30%	E	G	E	G	G	C	G	C	G	C
Disodium Phosphate	E	E	E	E	E	E	E	-	E	E	Hydrogen Peroxide 50%	E	C	E	C	C	U	U	U	C	U
Distilled Water	E	E	E	E	E	E	E	E	E	C	Hydrogen Peroxide 90%	U	U	U	U	U	U	U	U	U	U
Ethers	U	U	C	U	U	U	U	U	G	C	Hydrogen Phosphide	E	C	E	C	G	G	E	E	-	-
Ethyl Acetate	U	U	C	U	C	U	C	U	C	U	Hydrogen Sulfide (aqueous solution)	E	E	E	E	E	G	E	-	-	-
Ethyl Acrylate	U	U	U	U	-	-	-	-	-	-	Hydrogen Sulfide - Dry	E	E	E	E	E	G	E	-	-	-
Ethyl Alcohol 0 - 50%	G	C	E	G	G	C	G	C	G	C	Hydrobromic Acid 20%	E	E	E	E	E	E	E	-	U	U
Ethyl Alcohol 50%-98%	C	U	G	C	C	U	C	U	E	G	Hydroquinone	E	E	E	E	E	E	E	-	E	E
Ethyl Chloride	U	U	U	U	U	U	U	U	U	U	Hypochlorous Acid	E	E	E	E	E	G	C	U	C	U
Ethyl Ether	U	U	U	U	U	U	U	U	G	C	Inks	-	-	-	-	-	-	E	E	-	-
Ethylene Bromide	E	U	U	U	U	U	U	U	U	U	Iodine (in alcohol)	U	U	U	U	U	U	U	U	U	U
Ethylene Dichloride	U	U	U	U	U	U	U	U	U	U	Iso-octane	C	U	C	U	-	-	-	-	-	-
Ethylene Glycol	E	E	E	E	E	G	E	G	G	C	Isopropyl Acetate	U	U	-	-	-	-	-	-	-	-
Ethylene Oxide	U	U	U	U	U	U	U	U	U	U	Isopropyl Alcohol	E	G	E	G	E	E	E	-	-	-
Fatty Acids	E	E	E	E	G	C	C	U	G	C	Jelly	E	E	-	-	-	-	-	-	-	-
Ferric Chloride	E	E	E	E	E	E	E	-	E	E	Jet Fuels JP 3,4,5	U	U	U	U	U	U	-	-	G	C
Ferric Nitrate	E	E	E	E	E	E	E	-	E	E	Kerosene	U	U	C	U	U	U	U	U	E	G
Ferric Sulfate	E	E	E	E	E	E	E	-	E	E	Ketones	U	U	U	U	C	U	C	U	G	C
Ferrous Chloride	E	E	E	E	E	E	E	-	E	E	Kraft Liquor (paper industry)	E	E	E	E	E	G	G	-	-	-
Ferrous Sulfate	E	E	E	E	E	E	E	-	E	E	Lacquer Thinners	U	U	U	U	G	C	C	U	G	-
Fish Solubles	E	E	E	U	E	E	E	-	E	g	Lactic Acid 28%	E	E	E	E	E	E	E	-	C	U
Fluorine Gas - Dry	U	U	U	U	U	U	U	U	U	U	Lard Oil	E	G	E	E	G	C	G	C	E	G
Fluorine Gas - Wet	U	U	U	U	U	U	U	U	U	U	Lauric Acid	E	E	E	E	-	-	-	-	C	U
Fluoroboric Acid	E	E	E	E	E	E	E	-	E	E	Lauryl Chloride	E	E	E	E	C	U	C	-	E	G
Fluorosilicic Acid	E	E	E	E	G	C	G	-	U	U											
Foric Acid	E	C	E	C	E	G	E	E	U	U											
Fomaldehyde (40% aqueouse)	U	U	G	G	G	C	E	G	-	-											

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	68	150	68	125	68	150	68	150	68	150		68	150	68	125	68	150	68	150	68	150	68	150
Lauryl Sulfate	E	E	E	E	U	U	U	U	-	-	Pentane	C	U	C	U	-	-	-	-	-	-	-	
Lead Acetate	E	E	E	E	E	E	E	-	E	E	Peracetic Acid 40%	U	U	U	U	-	-	-	-	-	-	U	U
Lead Arsenate	E	E	E	E	-	-	E	E	-	-	Perchloroethylene	U	U	U	U	U	U	U	U	U	U	-	-
Lead Nitrate	E	E	E	E	-	-	E	E	-	-	Perchloric Acid 10%	G	C	G	C	G	C	G	G	G	G	U	U
Lead Tetra-ethyl	E	E	E	E	-	-	E	E	-	-	Perchloric Acid 70%	C	U	C	U	C	C	G	-	-	U	U	
Lemon Juice	E	G	-	-	-	-	-	-	-	-	Petrol	U	U	U	U	U	U	U	U	U	-	-	
Lime Sulfur	E	E	E	E	G	G	G	-	-	-	Petroleum Ether	C	C	C	C	-	-	U	U	U	U	-	-
Linoleic Acid	E	E	E	E	-	-	-	-	C	U	Phenol	U	U	U	U	U	U	U	U	U	U	U	U
Linseed Oil	E	E	E	E	U	U	C	U	E	E	Phenylhydrazine	U	U	U	U	C	U	-	-	-	-	-	-
Liquors (chemical)	E	G	E	G	-	-	E	G	-	-	Phenylhydrazine Hydrochloride	C	U	C	U	C	U	-	-	-	-	-	-
Lubricating Oils	G	C	G	G	U	U	U	U	E	E	Phosphoric Acid 50 - 90%	E	G	E	G	G	C	E	C	U	U	-	-
Magnesium Carbonate	E	E	E	E	E	E	E	-	E	E	Phosphorus (yellow)	G	C	G	C	C	C	U	U	-	-	-	-
Magnesium Chloride	E	E	E	E	E	E	E	-	E	E	Phosphorus Pentoxide	C	U	C	U	C	C	G	C	-	-	-	-
Magnesium Hydroxide	E	E	E	E	E	E	E	-	G	C	Phosphorus Trichloride	U	U	U	U	C	U	C	U	-	-	-	-
Magnesium Nitrate	E	E	E	E	E	E	E	-	E	E	Photographic Developers	C	U	C	U	-	-	E	E	C	-	-	-
Magnesium Sulfate	E	E	E	E	E	E	E	-	E	E	Photographic Emulsions	C	U	C	U	-	-	E	E	-	-	-	-
Maleic Acid 25% Aqueous	E	E	E	E	G	G	E	E	C	U	Photographic Fixers	C	U	C	U	-	-	E	E	-	-	-	-
Maleic Acid 50%	-	-	-	-	-	-	E	E	-	-	Picric Acid	U	U	U	U	G	U	G	C	U	U	-	-
Maleic Acid Concentrated	-	-	-	-	-	-	E	G	-	-	Pitch	G	C	G	C	-	-	-	-	-	-	-	-
Malic Acid	E	E	E	E	G	G	G	-	C	U													
Mayonnaise	E	E	-	-	-	-	-	-	-	-													
Mercuric Chloride	G	C	G	G	G	G	G	G	G	C													
Mercuric Cyanide	G	U	U	U	G	G	G	G	-	-													
Mercurous Nitrate	G	G	G	G	G	G	G	-	G	G													
Mercury	G	G	G	G	G	G	G	C	-	-													
Methyl Acetate	U	U	U	U	-	-	U	U	-	-													
Methyl Alcohol	C	U	C	U	G	G	E	-	C	U													
Methyl Bromide	U	U	U	U	-	-	U	U	-	-													
Methyl Chloride	U	U	U	U	U	U	U	U	U	U													
Methyl Ethyl Ketone	U	U	U	U	C	U	C	U	-	-													
Methyl Isobutyl Ketone	U	U	U	U	C	U	C	U	-	-													
Methyl Sulfate	E	G	E	G	-	-	-	-	E	G													
Methyl Sulfuric Acid	E	E	E	E	G	G	E	E	U	U													
Methylated Spirit	-	-	-	-	-	-	E	G	-	-													
Methylene Chloride	U	U	C	U	U	U	U	U	U	U													
Milk	E	E	-	-	-	-	G	C	-	-													
Mineral Oils	G	C	E	E	C	U	C	U	E	E													
Mineral Spirits	-	-	-	-	-	-	-	-	-	-													
Molasses	E	E	E	E	E	E	E	-	E	E													
Monochlorobenzene	U	U	U	U	-	-	-	-	-	-													
Naphtha	U	U	C	U	U	U	U	U	G	U													
Naphthalene	U	U	U	U	C	U	U	U	-	-													
Nickel Acetate	E	E	E	E	E	E	E	-	E	E													
Nickel Chloride	E	E	E	E	E	E	E	-	E	E													
Nickel Nitrate	E	E	E	E	E	E	E	-	E	E													
Nickel Sulphate	E	E	E	E	E	E	E	-	E	E													
Nicotine	E	E	E	E	E	E	E	-	C	C													
Nicotine Acid	E	G	E	E	E	E	E	-	C	C													
Nitric Acid (anhydrous)	U	U	U	U	U	U	U	U	U	U													
Nitric Acid 10%	E	G	G	C	G	C	G	G	U	U													
Nitric Acid 25%	G	C	G	C	G	C	G	C	U	U													
Nitric Acid 35%	G	C	G	C	C	U	C	U	U	U													
Nitric Acid 40%	G	C	G	C	C	U	C	U	U	U													
Nitric Acid 50%	G	U	G	U	C	U	C	U	U	U													
Nitric Acid 60%	G	U	G	U	U	U	U	U	U	U													
Nitric Acid 68%	C	U	C	U	U	U	U	U	U	U													
Nitric Acid 70%	U	U	U	U	U	U	U	U	U	U													
Nitrobenzene	U	U	U	U	U	U	U	U	U	U													
Nitrous Oxide	E	E	E	E	-	-	-	-	E	E													
Oils & Fats	E	G	E	E	G	C	G	U	E	E													
Oils, Petroleum	E	G	E	E	G	C	G	U	E	E													
Oleic Acid	G	C	G	C	C	U	U	U	U	U													
Oleum	U	U	U	U	U	U	U	U	U	U													
Orange Juice	E	E	-	-	-	-	-	-	-	-													
Oxalic Acid	E	G	E	G	G	G	G	G	U	U													
Oxygen	E	G	E	G	G	-	G	C	E	E													
Ozone	C	U	C	U	U	U	U	U	-	-													
Palmitic Acid 10%	E	E	E	E	G	C	E	G	U	U													
Palmitic Acid 70%	C	U	C	U	G	U	C	U	U	U													
Paraffin	E	G	E	G	-	-	C	U	E	G													

Key: E = Excellent • G = Good • C = Conditional • U = Unsatisfactory

Continued on the following page



General Thermoplastic Chemical Resistance Guide

Material Handled	PVC		PVC/PU Blend		Rubber Blend		EVA		TPU		Material Handled	PVC		PVC/PU Blend		Rubber Blend		EVA		TPU																																																								
	68	150	68	125	68	150	68	150	68	150		68	150	68	125	68	150	68	150	68	150																																																							
	Temperature (°F)																																																																											
Potassium Perchlorate	E	E	E	E	G	G	G	–	G	C	Sulfuric Acid 50 - 60%	E	G	E	G	G	C	G	C	U	U	Sulfuric Acid 70%	E	G	E	G	C	U	C	U	U	U	Sulfuric Acid 95%	U	U	U	U	U	U	U	U	U	U	Sulfuric Acid 95% Fuming	C	C	C	C	U	U	U	U	U	U	Sulfurous Acid	E	E	E	E	G	C	C	U	U	U	Sulphur Dioxide - Liquid	C	U	C	U	U	U	U	U	U	U
Potassium Permanganate 10%	G	G	E	E	E	E	U	U	G	C	Sulphur Dioxide Gas - Dry	E	E	E	E	G	G	E	G	–	–	Sulphur Dioxide Gas - Wet	C	U	C	U	G	C	E	C	–	–	Sulphur Trioxide	E	G	E	G	U	U	U	U	U	U																																	
Potassium Persulfate	E	E	E	E	E	E	E	–	E	E	Sulphurous Acid 10%	–	–	–	–	–	–	E	E	–	–	Sulphurous Acid 30%	–	–	–	–	–	–	U	U	–	–	Tallow	–	–	–	–	–	–	E	U	–	–	Tannic Acid	E	E	E	E	E	E	E	E	E	C	U	Tanning Extracts	–	–	–	–	–	–	E	E	–	–										
Potassium Phosphate	–	–	–	–	–	–	E	E	–	–	Tanning Liquors	E	E	E	E	G	C	C	–	–	–	–	Tartaric Acid	E	E	E	E	E	E	E	–	C	U	Tea (brewed)	E	G	–	–	–	–	G	C	–	–	Tetraethyl Lead	G	C	G	G	–	–	–	–	G	G	Tetrahydrofurane	U	U	U	U	U	U	U	U	U	U										
Potassium Sulfate	E	E	E	E	E	E	E	–	E	E	Thionyl Chloride	U	U	U	U	U	U	U	U	U	U	Tin Chloride	E	E	E	E	–	–	–	–	E	E	Titanium Tertachloride	E	U	E	U	–	–	–	–	C	U	Titanium Trichloride	–	–	–	–	–	–	U	U	–	–	Toluol or Toluene	U	U	C	U	U	U	U	U	C	U											
Potassium Sulfide	E	E	E	E	E	E	E	–	E	E	Tomato Juice	E	E	–	–	–	–	C	U	–	–	Transformer Oil	–	–	–	–	–	–	U	U	–	–	Transmission Fluid	E	C	E	C	–	–	–	–	E	E	Tributyl Phosphate	U	U	U	U	–	–	–	–	–	–	Trichlorobenzene	U	U	U	U	–	–	U	U	–	–											
Power Steering Fluid	E	C	E	C	–	–	–	–	E	E	Trichloroethylene	U	U	C	U	U	U	U	U	C	U	Tricresyl Phosphate	U	U	U	U	C	C	U	U	U	U	Triethanolamine	C	U	G	U	G	C	C	–	–	–	Triethylamine	G	C	G	C	–	–	–	–	–	–	Triemethyl Propane	C	U	C	U	–	–	–	–	–	–											
Propane	C	C	C	C	U	U	U	U	C	C	Trisodium Phosphate	E	E	E	E	E	E	E	–	E	E	Turpentine	C	U	G	C	C	U	U	U	E	G	Urea	E	E	E	E	E	E	E	–	E	E	Varnish	U	U	U	U	G	C	U	U	E	G																						
Propargyl Alcohol	E	E	E	E	G	G	E	E	–	–	Varsol	–	–	–	–	–	–	–	–	–	–	Vegetable Oils	G	C	G	C	–	–	U	U	–	–	Vinegar	E	E	–	–	E	G	E	–	G	C	Vinyl Acetate	U	U	U	U	C	U	U	U	U	U	Vinyl Chloride	U	U	U	U	–	–	–	–	–	–											
Propyl Alcohol	E	C	E	E	E	E	E	–	G	C	Water-Acid Mine Water	E	E	E	E	E	E	E	–	G	U	Water-Distilled	E	E	E	E	E	E	E	–	G	U	Water-Fresh	E	E	E	E	E	E	E	–	G	U	Water-Salt	E	E	E	E	E	E	E	–	G	U	Whey	E	G	–	–	–	–	G	C	–	–											
Propylene Dichloride	U	U	U	U	U	U	U	U	U	U	Whiskey	C	U	–	–	–	–	–	–	–	–	White Gasoline	E	E	E	E	U	U	U	U	E	G	White Liquor (paper industry)	E	E	E	E	–	–	–	–	–	–	Wines	G	C	–	–	–	–	–	–	–	–																						
Propylene Glycol	–	–	–	–	–	–	E	E	–	–	Xylene or Xylol	U	U	C	U	U	U	U	U	G	C	Zinc Chloride	E	E	E	E	E	E	E	–	E	E	Zinc Chromate	E	E	E	E	E	E	E	–	E	E	Zinc Cyanide	E	E	E	E	E	E	E	–	E	E	Zinc Nitrate	E	E	E	E	E	E	E	–	E	E											
Prune Juice	E	E	–	–	–	–	–	–	–	–	Zinc Sulfate	E	E	E	E	E	E	E	–	E	E	MIXTURES OF ACIDS																																																						
Ritchfield "A" Weed Killer	E	C	E	G	–	–	–	–	–	–	Nitric 15%, Hydrofluoric 4%	E	G	E	G	–	–	–	–	U	U	Sodium Dichromate 13%, Nitric Acid 16%, Water	E	G	E	G	E	E	E	E	E	C																																												
Salicylic Acid	–	–	–	–	–	–	E	E	–	–																																																																		
Salt Water	E	E	E	E	E	E	E	E	E	C																																																																		
Selenic Acid	E	G	E	G	G	C	G	C	U	U																																																																		
Shortening	G	C	–	–	–	–	E	E	–	–																																																																		
Silicic Acid	E	E	E	E	E	E	E	–	U	U																																																																		
Silicone Fluids	–	–	–	–	–	–	E	E	–	–																																																																		
Silver Cyanide	E	E	E	E	E	E	E	–	E	E																																																																		
Silver Nitrate	E	E	E	E	E	E	E	–	E	E																																																																		
Silver Plating Solutions	E	G	E	G	E	G	E	–	E	E																																																																		
Soap Solution	E	G	E	G	E	G	G	C	G	U																																																																		
Sodium Acetate	E	E	E	E	E	E	E	–	E	E																																																																		
Sodium Acid Sulfate	E	E	E	E	E	E	E	–	E	E																																																																		
Sodium Antimonate	E	E	E	E	E	E	E	–	E	E																																																																		
Sodium Arsenite	E	E	E	E	E	E	E	–	E	E																																																																		
Sodium Benzoate	E	G	E	E	E	E	E	–	E	E																																																																		
Sodium Bicarbonate	E	E	E	E	E	E	E	–	E	E																																																																		
Sodium Bisulfate	E	E	E	E	E	E	E	–	E	E																																																																		
Sodium Bisulfite	E	E	E	E	E	E	E	–	E	E																																																																		
Sodium Bromide	E	E	E	E	E	E	E	–	E	G																																																																		
Sodium Carbonate (soda ash)	E	E	E	E	E	E	E	–	E	E																																																																		
Sodium Chlorate	G	C	G	C	E	E	E	–	G	G																																																																		
Sodium Chloride	E	E	E	E	E	E	E	–	E	G																																																																		
Sodium Cyanide	E	E	E	E	E	E	E	–	E	E																																																																		
Sodium Dichromate	E	G	E	G	E	E	E	–	E	G																																																																		
Sodium Ferricyanide	E	E	E	E	E	E	E	–	E	E																																																																		
Sodium Ferrocyanide	E	E	E	E	E	E	E	–	E	E																																																																		
Sodium Fluoride	E	E	E	E	E	E	E	–	E	G																																																																		
Sodium Hydroxide 10%	E	E	E	E	E	E	E	–	G	C																																																																		
Sodium Hydroxide 35%	E	G	E	E	E	E	E	–	C	U																																																																		
Sodium Hydroxide 50%	G	C	–	–	–	–	–	–	–	–																																																																		
Sodium Hypochlorite	E	E	E	E	E	E	E	–	U	U																																																																		
Sodium Nitrate	E	E	E	E	E	E	E	–	E	E																																																																		
Sodium Nitrite	E	E	E	E	E	E	E	–	E	E																																																																		
Sodium Phosphate-Acid	G	G	G	G	E	E	E	–	U	U																																																																		
Sodium Silicate	E	E	E	E	E	E	E	–	E	E																																																																		
Sodium Sulfate	E	E	E	E	E	E	E	–	E	E																																																																		
Sodium Sulfide	E	E	E	E	E	E	E	–	E	E																																																																		
Sodium Sulfite	E	E	E	E	E	E	E	–	E	E																																																																		
Sodium Thiosulfate (hypo)	E	E	E	E	E	E	E	–	E	G																																																																		
Soft Drinks	E	G	–	–	–	–	G	E	–	–																																																																		
Soya Oil	E	G	–	–	–	–	–	–	–	–																																																																		
Soybean Oil	G	C	–	–	–	–	–	–	–	–																																																																		
Stannic Chloride	E	E	E	E	E	E	E	–	E	G																																																																		
Stannous Chloride	E	G	E	G	E	E	E	–	E	G																																																																		
Starch	–	–	–	–	–	–	E	E	–	–																																																																		
Stearic Acid	C	C	C	C	E	E	E	–	C	U																																																																		
Stoddard Solvent	C	U	G	C	G	C	C	U	G	U																																																																		
Styrene	U	U	U	U	–	–	–	–	–	–																																																																		
Sucrose	–	–	–	–	–	–	E	E	–	–																																																																		
Sulfur	G	G	G	G	E	E	–	–	–	–																																																																		
Sulfuric Acid 0 - 10%	E	G	E	G	E	G	G	–	U	U																																																																		
Sulfuric Acid 10 - 40%	E	G	E	G	G	G	G	U	U	U																																																																		

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