



PIPE & COUPLING

CHEMICAL RESISTANCE GUIDE

Tyler Pipe/Soil Pipe Division • 11910 CR 492 • Tyler, TX 75706 • (800) 527-8478

RESISTANCE RATING KEY:

E = Excellent G = Good C = Conditional U = Unsatisfactory - = Test Data Not Available

AGENT								AGENT							
	NITRILE	NEOPRENE	EPOXY	STAINLESS STEEL	DUCTILE/CAST IRON	BRONZE	ALUMINUM		NITRILE	NEOPRENE	EPOXY	STAINLESS STEEL	DUCTILE/CAST IRON	BRONZE	ALUMINUM
Acetaldehyde	U	C	E	E	C	G	G	Ammonium Phosphate, Mono-Di-Tri	E	E	E	E	C	C	G
Acetamide	E	G	E	E	U	U	-	Ammonium Sulfate	E	E	E	G	C	G	G
Acetic Acid (Up to 10%, 100°F Max.)	G	E	C	E	U	C	G	Ammonium Sulfide	E	E	-	E	U	U	C
Acetic Acid (10-50%, 100°F Max.)	G	G	G	E	U	C	G	Ammonium Thiocyanate	E	E	-	G	-	-	-
Acetic Acid, Glacial (100°F Max.)	U	U	G	E	U	C	G	Amyl Acetate	U	U	E	E	C	C	G
Acetic Anhydride	U	G	E	E	G	C	G	Amyl Alcohol	G	G	U	E	C	E	G
Acetone	U	U	U	E	E	E	E	Amyl Borate	E	E	-	-	-	-	-
Acetonitrile	G	-	-	-	-	-	-	Amyl Chloride	U	U	E	G	-	E	U
Acetaphenone	U	U	-	-	-	-	-	Amyl Chloronaphthalene	U	U	-	-	-	-	-
Acrolein, (40%, 120°F)	-	-	-	G	G	G	E	Amyl Naphthalene	U	U	-	-	-	-	-
Acrolein, (100%, 200°F)	-	-	-	G	G	G	G	Aniline	U	U	C	E	C	C	C
Acrylic Resin	-	G	-	-	-	-	-	Aniline Dyes	U	G	-	E	C	C	C
Acrylonite	U	U	-	E	C	E	G	Aniline Hydrochloride	G	U	-	-	-	-	-
Acrylonitrile	U	U	E	E	E	E	G	Aniline Oil	U	U	E	E	E	E	C
Adipic Acid	E	-	-	G	-	-	G	Animal Fats	E	G	E	E	E	-	-
Allyl Alcohol, (up to 96%)	E	E	-	E	E	G	C	Animal Oil, (Lard Oil)	E	G	E	E	E	E	E
Allyl Chloride	U	-	-	-	-	-	-	Anthraquinone	U	U	-	-	-	-	-
Alums, NH ₄ Cr ₂ K ₂ Na	E	E	-	E	U	U	G	Anthraquinone Sulfonic Acid	U	U	-	-	-	-	-
Aluminum Acetate	G	G	-	E	U	U	C	Antimony Trichloride	U	U	E	U	-	-	U
Aluminum Bromide	E	E	-	-	-	-	-	Apple Juice	E	E	-	G	U	C	G
Aluminum Chloride	E	E	E	C	U	U	U	Aqua Regia	U	U	U	U	-	U	U
Aluminum Fluoride	E	E	G	C	U	-	G	Arochlor 1248	C	U	E	G	-	-	E
Aluminum Hydroxide	G	E	G	C	E	C	G	Arochlor 1254	C	U	-	-	-	-	-
Aluminum Nitrate	E	E	-	C	U	U	U	Arochlor 1260	U	U	-	-	-	-	-
Aluminum Phosphate	E	E	-	-	-	-	-	Aromatic Solvents	U	U	E	E	G	E	E
Aluminum Salts	E	E	-	-	-	-	-	Arsenic Acid, (up to 75%)	E	E	E	E	U	U	U
Aluminum Sulphate	E	E	E	G	U	CG		Arylsulfonic Acid	U	U	-	-	-	-	-
Ammonia Liquid	G	E	E	E	E	U	C	ASTM Oil #1	E	E	E	E	E	E	E
Ammonium Alum	E	E	-	-	-	-	-	ASTM Oil #2	E	G	E	E	E	E	E
Ammonium Bifluoride	G	-	E	E	-	-	U	ASTM Oil #3	E	U	E	E	E	E	E
Ammonium Carbonate	U	E	E	E	C	G	C	ASTM Ref Fuel A	E	G	E	E	E	E	E
Ammonium Chloride	E	E	E	C	U	U	C	ASTM Ref Fuel B	E	U	E	E	E	E	E
Ammonium Diphosphate, (Up to 10% and 70°F)	-	-	-	G	G	C	U	ASTM Ref Fuel C	G	U	E	E	E	E	E
Ammonium Diphosphate, (Up to 10% and 200°F)	-	-	-	G	-	U	U	Bardol B	U	U	-	-	-	-	-
Ammonium Fluoride	-	-	-	G	-	-	-	Barium Carbonate	E	E	E	E	G	G	G
Ammonium Hydroxide	U	E	E	E	E	U	C	Barium Chloride	E	E	E	E	C	G	U
Ammonium Nitrate	E	G	E	E	E	U	G	Barium Cyanide	C	E	E	G	G	U	U
Ammonium Persulfate, (Up to 10%)	U	E	E	E	U	E	C	Barium Hydroxide	E	E	E	E	C	G	U
								Barium Nitrate	E	E	E	E	E	U	G
								Barium Sulfate	E	E	C	E	C	C	U
								Barium Sulfide	E	E	G	E	C	C	U

E = Excellent G = Good C = Conditional U = Unsatisfactory - = Test Data Not Available

CHEMICAL RESISTANCE GUIDE

Tyler Pipe/Soil Pipe Division • 11910 CR 492 • Tyler, TX 75706 • (800) 527-8478



PIPE & COUPLING

AGENT								AGENT							
	NITRILE	NEOPRENE	EPOXY	STAINLESS STEEL	DUCTILE/CAST IRON	BRONZE	ALUMINUM		NITRILE	NEOPRENE	EPOXY	STAINLESS STEEL	DUCTILE/CAST IRON	BRONZE	ALUMINUM
Beer	E	E	E	E	U	E	E	Calcium Sulfide	E	E	-	-	-	-	-
Beet Sugar Liquors	E	E	E	E	E	E	E	Calcium Silicate	G	G	-	G	C	C	U
Benzaldehyde	U	U	E	E	G	E	G	Caliche Liquors	E	E	-	E	-	-	-
Benzene	U	U	C	E	G	G	G	Camphor	G	G	-	G	C	C	C
Benzene, (Benzol)	U	U	U	E	G	E	G	Cane Sugar Liquors	E	E	E	E	E	G	G
Benzene Sulfonic, (Aromatic Acid)	U	G	-	G	-	-	-	Carbitol	G	G	-	-	-	-	-
Benzine	E	C	C	E	G	G	G	Carbolic Acid, Phenol	U	U	C	G	U	E	G
Benzoic Acid	U	U	E	G	U	C	G	Carbonated Beverages	G	G	-	G	G	G	G
Benzyl Acetate	-	-	-	G	E	-	E	Carbonated Water	E	E	-	E	E	G	E
Benzyl Alcohol	U	G	E	E	E	E	G	Carbon Bisulfide	U	U	E	G	G	G	G
Benzyl Benzoate	U	U	-	-	-	-	-	Carbon Dioxide, Wet	E	G	E	E	U	E	G
Benzyl Chloride	U	U	-	-	E	-	-	Carbon Disulfide	U	U	C	E	G	C	C
Beryllium Sulfate	G	G	-	G	G	G	G	Carbon Monoxide	E	G	E	E	U	C	E
Black Liquor, (Sodium Bisulfite)	E	E	E	E	C	C	E	Carbon Tetrachloride	C	U	E	G	C	E	U
Black Sulphate Liquor	G	G	E	E	C	C	G	Carbonic Acid	E	E	G	E	U	U	G
Bleach, (12% Active Cl2)	U	U	-	-	-	-	-	Casein	G	G	-	G	C	C	C
Bleaching Water	-	-	-	G	U	U	U	Castor Oil	E	E	E	E	G	E	E
Bleaching Powder, Wet	U	E	-	C	-	G	-	Caustic Potash	G	G	E	G	C	U	U
Boric Acid	E	E	E	E	U	G	U	Cellosolve	U	U	-	-	-	-	-
Brake Fluid	U	C	-	G	G	G	G	Cellosolve Acetate	U	U	-	-	-	-	-
Brine	E	E	-	G	U	-	U	Cellosolve, (Alcohol Ether)	U	U	-	-	-	-	-
Bromine	U	U	U	U	U	C	U	Cellosolve Butyl	U	U	-	-	-	-	-
Bromine Water	U	U	U	U	C	U	U	China Wood, Oil, Tung Oil	E	G	-	E	C	C	-
Bunker Oil, (Fuel Oil)	E	C	-	E	G	G	E	Chloracetic Acid	U	U	G	U	U	U	C
Butadiene	U	G	E	E	C	C	E	Chloralhydrate	U	U	-	-	-	-	-
Butric Acid	E	E	-	G	U	U	C	Chloric Acid, (up to 20%)	U	U	-	C	-	-	U
Butyl Acetate	U	U	G	C	E	E	G	Chlorinated Salt Brine	U	U	-	-	-	-	-
Butyl Acetyl Ricinoleate	G	G	-	-	-	-	-	Chlorinated Solvents	U	U	-	G	C	C	-
Butyl Alcohol (Butanol)	E	E	E	E	U	G	G	Chlorine, Water	U	U	E	C	U	U	U
Butyl, (Cellosolve Adipate)	U	U	-	-	-	-	-	Chloroacetone	U	G	-	-	-	-	-
Butyl Stearate	G	U	-	-	-	-	-	Chlorobenzene	U	U	E	E	G	G	G
Butylene	G	C	E	E	E	E	E	Chlorobromomethane	U	U	-	G	C	G	C
Butyne Diol	U	U	-	-	-	-	-	Chloronapthalene	U	U	-	-	-	-	-
Butyraldehyde	C	U	-	G	-	-	-	Chloro Nitro Ethane	U	U	-	-	-	-	-
Calcium Acetate	G	G	-	-	-	-	-	Chlorophyll	G	G	-	G	G	G	G
Calcium Bicarbonate	-	-	-	G	G	G	G	Chlorosulfonic Acid	U	U	C	G	U	U	C
Calcium Bisulfate	G	E	E	E	U	U	U	Chlorotoluene	U	U	-	-	-	-	-
Calcium Bisulfide	G	E	E	G	-	C	C	Chlorox	G	G	E	E	U	E	C
Calcium Bisulfite	E	E	E	E	U	C	C	Chrome Alum	E	E	-	-	-	-	-
Calcium Carbonate	E	E	E	G	U	C	U	Chrome Plating Solutions	U	U	U	U	-	U	E
Calcium Chlorate	G	G	E	G	C	U	G	Chromic Acid, (Up to 50%)	U	U	C	G	U	U	U
Calcium Chloride	E	E	E	C	C	G	C	Chromic Acid, (Greater than 50%)	U	U	-	C	C	U	U
Calcium Hydroxide, (Lime)	E	E	E	E	E	U	C	Chromium Sulfate	G	G	-	G	U	C	G
Calcium Hypochloride	U	U	-	-	-	-	-	Cider	E	E	E	E	U	E	G
Calcium Hypochlorite	U	C	E	C	U	U	C	Citric Acid	E	E	E	E	U	U	C
Calcium Nitrate	E	E	-	G	-	-	G	Citrus Juices	E	E	-	G	U	G	C
Calcium Phosphate	G	G	-	G	C	C	U	Coconut Oil	E	G	E	E	E	E	E
Calcium Sulfate	E	E	E	G	C	C	G	Cod Liver Oil	E	G	E	E	-	E	E

E = Excellent G = Good C = Conditional U = Unsatisfactory - = Test Data Not Available



PIPE & COUPLING

CHEMICAL RESISTANCE GUIDE

Tyler Pipe/Soil Pipe Division • 11910 CR 492 • Tyler, TX 75706 • (800) 527-8478

AGENT	NITRILE	NEOPRENE	EPOXY	STAINLESS STEEL	DUCTILE/CAST IRON	BRONZE	ALUMINUM	AGENT	NITRILE	NEOPRENE	EPOXY	STAINLESS STEEL	DUCTILE/CAST IRON	BRONZE	ALUMINUM
Coffee	E	E	-	E	U	E	E	Dioxane	U	U	-	-	E	-	-
Cooking Oil	E	G	-	E	G	G	G	Dioxolane	U	U	-	-	-	-	-
Copper Acetate	C	C	-	E	U	U	U	Dipentene, (Terpene-Hydrocarbon)	G	U	-	-	-	-	-
Copper Carbonate	-	-	-	E	-	-	U	Diphenyl	U	U	-	-	-	-	-
Copper Chloride	E	E	E	U	U	U	U	Diphenyl Oxides	U	U	E	G	E	E	G
Copper Cyanide	E	E	G	E	U	C	U	Dipropylene Glycol	E	E	E	E	G	-	-
Copper Nitrate	E	E	E	G	U	U	U	Disodium Phosphate	G	G	-	G	-	-	G
Copper Sulfate	E	E	E	G	U	U	U	Dowtherm A	U	U	E	E	G	-	-
Corn Oil	E	E	E	E	E	C	E	Dowtherm E	U	U	E	E	G	-	-
Cotton Seed Oil	E	E	E	E	E	E	E	Dowtherm SR1	G	-	E	E	G	-	-
Creosote (Wood or Coal Tar)	E	G	E	E	C	C	G	Drilling Mud	E	C	-	E	G	G	G
Cresol	U	U	E	E	C	C	G	Dry Cleaning Fluids	U	U	-	E	G	C	E
Cresylic Acid	U	U	-	G	U	C	C	Drying Oil	E	U	-	G	G	C	C
Crude Oil, Sour	E	G	-	E	C	C	G	Enamel	G	G	-	-	-	E	-
Crude Oil, Sweet	E	G	-	E	G	G	E	Epsom Salts, (MgSo4)	E	E	E	G	C	G	E
Cupric Sulphate	E	E	-	-	-	-	-	Ethane	E	G	-	G	C	G	A
Cyanide Plating Solutions	G	G	-	G	U	U	U	Ethanolamine	G	G	E	E	-	E	G
Cyclohexane, (Alicyclic Hydrocarbon)	E	U	E	E	E	U	E	Ethers	U	U	E	E	G	G	E
Cyclohexanol	G	G	-	-	-	-	-	Ethyl Acetate	U	U	C	G	E	E	G
Cyclohexanone	U	U	-	G	-	-	-	Ethyl Acetoacetate	U	U	-	-	-	-	-
Cymene	U	U	-	-	-	-	-	Ethyl Acrylate	U	U	-	-	-	-	-
Deionized Water	E	C	E	E	U	U	E	Ethyl Alcohol (Ethanol)	E	E	E	E	E	E	G
Detergents, Synthetic	G	G	-	G	G	G	G	Ethyl Benzene	U	U	-	-	-	-	E
Developing Solutions, (Hypos)	E	E	E	E	U	U	C	Ethyl Bromide	G	U	-	G	G	E	G
Dextrin	G	G	-	G	G	G	G	Ethyl Cellosolve	U	U	-	-	-	-	-
Diacetone Alcohol	U	E	E	E	E	E	E	Ethyl Chloride	E	G	E	E	C	E	G
Dibenzyl Ether	U	U	-	-	-	-	-	Ethyl Dichloride	U	U	-	G	-	-	-
Dibutyl Phthalate	U	U	-	-	-	-	-	Ethyl Ether	C	U	-	-	-	-	-
Dichloroethane	U	U	-	C	C	-	-	Ethyl Formate	U	G	-	-	-	-	-
Dichloroethyl Ether	U	U	-	G	G	G	G	Ethyl Mercaptan	U	U	-	-	-	-	-
Dichlorobenzene	U	U	-	-	-	-	-	Ethyl Oxalate	U	C	-	-	-	-	-
Dicyclohexylamine	C	U	-	-	-	-	-	Ethyl Pentochlorobenzene	U	U	-	-	-	-	-
Diesel Oil	E	C	E	E	G	E	E	Ethyl Silicate	E	E	-	-	-	-	-
Diethyl Benzene	U	U	-	G	-	-	-	Ethyl Sulfate	G	G	E	G	-	E	-
Diethyl Ether	U	U	-	-	-	-	-	Ethylene Chloride	U	U	G	E	-	-	C
Diethyl Sebacate	U	U	-	-	-	-	-	Ethylene Chlorohydrin	U	G	-	-	-	-	-
Diethyl Sulfate	C	C	-	G	G	G	G	Ethylene Diamine	E	E	-	-	-	-	-
Diethylamine	C	G	E	G	G	E	G	Ethylene Dichloride, (Dichloroethane)	U	U	C	E	E	C	G
Diethylene Glycol	E	E	C	E	E	E	G	Ethylene Glycol	E	E	C	E	E	E	G
Di-Isopropyl Ketone	U	U	-	-	-	-	-	Ethylene Oxide	U	U	E	E	U	E	G
Dimethyl Aniline	U	U	-	-	-	-	-	Fatty Acids	G	G	E	E	C	C	E
Dimethyl Ether	U	U	-	-	-	-	-	Ferric Chloride, (Up to 15%)	E	E	E	C	U	U	U
Dimethyl Formamide	G	U	-	E	G	G	G	Ferric Chloride, Saturated	E	G	E	C	U	U	U
Dimethyl Phthalate	U	U	-	-	-	-	-	Ferric Nitrate	E	E	E	G	-	U	C
Dimethylamine	G	G	-	-	-	-	-	Ferric Sulfate	E	E	E	E	U	U	C
Diocetyl Phthalate	U	U	-	-	-	-	-								

E = Excellent G = Good C = Conditional U = Unsatisfactory - = Test Data Not Available

CHEMICAL RESISTANCE GUIDE

Tyler Pipe/Soil Pipe Division • 11910 CR 492 • Tyler, TX 75706 • (800) 527-8478



PIPE & COUPLING

AGENT							AGENT								
	NITRILE	NEOPRENE	EPOXY	STAINLESS STEEL	DUCTILE/CAST IRON	BRONZE		ALUMINUM	NITRILE	NEOPRENE	EPOXY	STAINLESS STEEL	DUCTILE/CAST IRON	BRONZE	ALUMINUM
Ferrous Ammonium Citrate	-	-	-	G	-	-	G	Hydraulic Oil, (Petroleum Base)	E	G	E	E	G	G	E
Ferrous Ammonium Sulfate, (To 30%)	G	G	E	G	U	U	E	Hydrazine	C	C	E	G	U	U	C
Ferrous Chloride	E	E	E	U	U	G	U	Hydrobromic Acid, (Up to 40%)	U	E	C	U	U	U	U
Ferrous Sulfate	E	E	E	G	U	G	C	Hydrochloric Acid, (Up to 36%, 75°F)	G	G	E	U	U	U	U
Ferrous Sulfate, Saturated	C	C	E	E	C	C	C	Hydrochloric Acid, (Up to 36%, 158°F)	U	U	E	U	U	U	U
Fertilizer Solutions	G	G	-	G	G	C	G	Hydrocyanic Acid	G	G	E	G	U	U	G
Fish Oils	E	G	G	E	G	G	C	Hydrofluoric Acid, (Up to 75%, 75°F Max.)	U	U	G	U	U	U	U
Fluoboric Acid	E	E	E	C	U	U	U	Hydrofluosilicic Acid	G	G	C	C	U	U	U
Fluorine, Gas, Wet	U	U	U	C	U	U	U	Hydrogen Peroxide, (Up to 50%)	U	U	G	G	U	G	E
Fluorobenzene	U	U	-	-	-	-	-	Hydrogen Peroxide, (Up to 90%)	U	U	E	G	U	U	E
Fluosilicic Acid	E	E	C	G	U	U	C	Hydrogen Phosphide	U	U	-	-	-	-	-
Formaldehyde, Cold	G	C	E	E	G	E	E	Hydrogen Sulfide, Wet	U	G	E	G	U	U	U
Formaldehyde, Hot	G	G	-	C	U	G	G	Hydroquinone	C	U	-	-	-	-	-
Formamide	E	E	-	-	-	-	-	Hypo, (Sodium Thiosulfate)	E	E	-	G	C	C	G
Formic Acid, Cold	U	G	C	G	U	G	U	Hypochlorous Acid, Dilute	U	U	-	-	-	-	-
Formic Acid, Hot	U	E	-	G	U	G	U	Inks	E	E	E	E	U	C	C
Fructose	E	E	E	E	U	C	E	Iodine	C	U	C	C	U	U	E
Fruit Juices	E	E	E	E	U	G	G	Iodoform	-	E	-	E	C	C	C
Fuel Oil	E	G	E	E	E	E	C	Iso-Butane	G	U	-	G	-	-	-
Fumaric Acid	E	G	-	-	-	-	-	Iso-Octane, (100°F Max.)	E	C	E	E	G	E	E
Furan	U	U	E	E	E	E	E	Isobutyl Alcohol	G	E	-	-	-	-	-
Furfural	U	U	E	G	E	E	E	Isododecane	E	G	-	-	-	-	-
Fyrquel 150, 220, 300, 550	U	U	-	-	-	-	-	Isopropyl Acetate	U	U	E	E	-	G	G
Gallic Acid	G	G	-	E	U	E	E	Isopropyl Alcohol (Isopropanol)	G	G	E	E	G	E	G
Gasoline, Leaded	G	C	E	E	E	E	E	Isopropyl Chloride	U	U	-	-	-	-	-
Gasoline, Unleaded	C	C	E	E	G	E	E	Isopropyl Ether	G	C	U	E	G	E	E
Gasoline, Aviation	C	C	E	E	G	E	E	Jet Fuel, (JP-3, JP-4, JP-5, JP-6)	E	C	E	E	E	E	E
Gasoline, Sour	C	C	E	E	G	U	G	Kerosene	E	C	E	E	E	E	E
Gasoline, Motor	C	C	E	E	G	E	E	Ketchup	E	-	-	E	U	U	-
Gelatin	E	E	G	E	U	E	G	Ketones	U	U	C	E	E	E	E
Glauber's Salt	U	G	-	E	G	G	-	Lacquers, (and Solvents)	U	U	E	E	C	E	E
Glucose	E	E	G	E	E	E	E	Lactic Acid, Cold	E	E	G	G	U	C	G
Glue	E	E	E	E	E	E	C	Lactic Acid, Hot	U	U	G	G	U	C	G
Glycerin	E	E	E	E	E	E	E	Lactose	G	C	-	G	C	G	G
Glycerol	E	E	E	E	E	E	E	Lard Oil	E	G	G	E	E	E	E
Glycol	E	E	-	E	G	G	E	Latex, (1% Styrene and Butadiene)	G	C	E	E	-	E	E
Glycol Amine	E	C	-	G	G	U	C	Lauryl Chloride	U	U	-	-	-	-	-
Glycolic Acid	E	E	E	E	-	-	-	Lavender Oil	G	U	-	-	-	-	-
Grease	E	E	E	E	E	E	E	Lead Acetate	G	G	E	G	E	E	U
Green Sulfate Liquor	G	G	-	E	G	U	U	Lead Nitrate	E	E	-	G	-	-	-
Halowax Oil	U	U	-	-	-	-	-	Lead Sulfamate	G	E	E	C	-	-	C
Heptane	E	G	E	E	E	E	E	Lead Sulfate	E	E	-	-	-	-	-
Hexaldehyde	U	E	-	-	-	-	-	Lecithin	U	U	-	G	C	C	C
Hexane	E	G	E	E	E	E	E								
Hexanol, Tertiary	G	U	-	E	E	E	E								
Hexyl Alcohol	E	G	E	E	G	E	E								
Hexylene Glycol	E	E	-	-	-	-	-								

E = Excellent G = Good C = Conditional U = Unsatisfactory - = Test Data Not Available



PIPE & COUPLING

CHEMICAL RESISTANCE GUIDE

Tyler Pipe/Soil Pipe Division • 11910 CR 492 • Tyler, TX 75706 • (800) 527-8478

AGENT								AGENT							
	NITRILE	NEOPRENE	EPOXY	STAINLESS STEEL	DUCTILE/CAST IRON	BRONZE	ALUMINUM		NITRILE	NEOPRENE	EPOXY	STAINLESS STEEL	DUCTILE/CAST IRON	BRONZE	ALUMINUM
Lime Bleach	E	G	E	E	E	E	U	Methylamine	U	U	-	E	G	U	E
Lime and H2O	E	G	E	E	E	E	U	Methylene Chloride	U	U	E	G	E	E	E
Linoleic Acid	G	U	-	-	-	-	-	Methylene Dichloride	U	U	-	-	-	-	-
Linseed Oil	E	G	E	E	E	E	G	Milk	E	E	E	E	U	C	E
Lubricating Oils, (Petroleum)	E	G	E	E	E	E	E	Mineral Oils	E	G	E	E	E	E	E
Lubricating Oil, Refined (Petroleum)	E	G	E	E	E	E	E	Mineral Spirits	E	C	-	G	G	G	E
Lubricating Oil, Sour (Petroleum)	U	U	-	-	-	-	-	Mixed Acids, (Cold)	U	U	-	G	C	U	U
Lubricating Oil, (Up to 180°F)	E	C	E	E	E	E	E	Molasses, Crude	E	E	E	E	E	E	G
Lubricating Oil, (180 F to 200°F)	G	C	E	E	E	E	E	Molasses, Edible	E	E	E	E	C	E	E
Ludox	G	G	-	G	G	U	U	Monobromobenzene	U	U	-	-	-	-	-
Lye Solution	G	G	-	-	-	-	-	Monochlorobenzene	U	U	-	-	-	-	-
Magnesium Bisulfate	G	G	-	E	G	G	G	Monomethylether	U	U	-	-	-	-	-
Magnesium Bisulfide	G	G	-	G	U	U	C	Morpholine	U	U	-	E	G	G	G
Magnesium Carbonate	G	G	E	E	G	G	G	Naptha	G	C	E	E	E	G	E
Magnesium Chloride	E	E	E	E	U	C	U	Naphthalene	U	U	E	E	E	C	G
Magnesium Hydroxide	G	G	E	E	E	E	C	Naphthenic Acid	G	U	-	E	-	-	-
Magnesium Hydroxide, Hot	G	G	-	E	G	U	U	Nickel Acetate, (Up to 10%, 100°F)	G	G	-	G	-	-	-
Magnesium Nitrate	E	G	E	E	U	U	C	Nickel Chloride	E	E	E	C	U	U	U
Magnesium Oxide	E	E	E	E	E	E	-	Nickel Nitrate	E	E	-	E	-	-	-
Magnesium Sulfate	E	E	E	G	E	C	G	Nickel Plating Solution	-	-	E	C	-	-	-
Maleic Acid	U	U	E	G	E	E	G	Nickel Sulfate	E	E	E	G	U	C	U
Maleic Anhydride	U	U	E	-	-	-	E	Nicotinic Acid	U	U	-	E	C	E	E
Malic Acid	E	G	-	E	-	E	G	Niter Cake	E	E	-	-	-	-	-
Malt Beverages	E	E	-	E	-	-	-	Nitric Acid, (Up to 10%, 75°F)	U	G	E	E	U	U	U
Manganese Carbonate	G	-	-	G	-	-	B	Nitric Acid, (10-70%, 75°F)	U	U	U	E	U	U	U
Manganese Sulfate	G	G	-	E	U	G	G	Nitric Acid, Red Fuming	U	U	U	E	U	U	U
Meat Juices	G	G	-	E	-	U	G	Nitrobenzene	U	U	C	E	C	C	E
Melamine Resins	G	G	E	C	U	U	-	Nitroethane	U	C	-	-	-	-	-
Mercuric Chloride	E	E	E	C	U	U	U	Nitromethane	U	C	-	-	-	-	-
Mercuric Cyanide	G	G	E	G	-	U	U	Nitropropane	U	U	-	-	-	-	-
Mercurous Nitrate	G	-	-	E	-	-	-	Nitrous Acid, (10%)	C	E	-	G	U	U	U
Mercury	E	E	E	E	E	U	C	Octyl Alcohol	G	E	E	E	E	E	E
Mesityl Oxide	U	U	-	-	-	-	-	Oil, Motor	E	G	E	E	E	E	E
Methane	E	G	-	E	G	E	E	Oil, Petroleum Refined	E	G	E	E	E	E	E
Methyl Acetate	U	G	U	E	-	E	E	Oil, Petroleum Sour	U	U	-	E	C	C	E
Methyl Acetone	U	U	-	E	E	E	E	Oil, Water Mixture	E	E	-	E	G	E	E
Methyl Alcohol (Methanol)	E	E	G	E	E	E	E	Olaic Acid	U	U	-	G	-	-	G
Methyl Bromide, (100%)	G	U	-	G	U	C	C	Oleic Acid	C	C	E	G	C	C	G
Methyl Cellulose	G	G	-	E	-	-	-	Oleum	U	U	-	G	U	C	G
Methyl Chloride	U	U	E	E	E	C	U	Oleum Spirits	G	C	U	G	-	U	G
Methyl Cyclopentane	U	U	-	-	-	-	-	Olive Oil	E	G	E	E	G	E	E
Methyl Ethyl Ketone	U	U	C	E	E	E	E	Oxalic Acid	G	G	E	G	C	E	G
Methyl Formate	U	G	-	-	-	-	-	Paints & Solvents	U	U	-	E	E	E	E
Methyl Isobutyl Ketone	U	U	C	E	E	C	E	Palm Oil	G	G	E	E	C	G	E
Methyl Isobutyl Carbinol	E	E	-	-	-	-	-	Paper Pulp	G	G	-	E	G	G	U
Methyl Methacrylate	U	U	E	-	-	-	-	Paraffin	E	C	E	E	G	E	E
Methyl Salicylate	U	U	-	-	-	-	-	Paraformaldehyde	G	G	-	G	G	G	G

E = Excellent G = Good C = Conditional U = Unsatisfactory - = Test Data Not Available

CHEMICAL RESISTANCE GUIDE

Tyler Pipe/Soil Pipe Division • 11910 CR 492 • Tyler, TX 75706 • (800) 527-8478



PIPE & COUPLING

AGENT								AGENT							
	NITRILE	NEOPRENE	EPOXY	STAINLESS STEEL	DUCTILE/CAST IRON	BRONZE	ALUMINUM		NITRILE	NEOPRENE	EPOXY	STAINLESS STEEL	DUCTILE/CAST IRON	BRONZE	ALUMINUM
Pentane	E	G	E	C	G	C	E	Potassium Phosphate	E	E	-	G	C	C	U
Perchloric Acid	U	G	-	-	-	-	-	Potassium Phosphate Di-Basic	E	E	-	E	E	G	G
Perchloroethylene	C	U	U	E	E	U	G	Potassium Phosphate Tri-Basic	G	G	-	G	E	-	U
Phenylbenzene	U	U	-	-	-	-	-	Potassium Silicate	E	E	-	-	-	-	-
Phenyl Ethyl Ether	U	U	-	-	-	-	-	Potassium Sulfate	E	E	E	G	E	C	U
Phosphate Ester, (10%)	U	E	-	E	E	U	U	Potassium Sulfide	E	G	-	E	G	G	G
Phosphoric Acid, (50%, Cold)	G	G	G	G	U	U	U	Potassium Sulfite	G	G	-	E	G	G	G
Phosphoric Acid, (50%, Hot)	G	G	G	U	U	U	U	Potassium Thiosulfate	E	E	-	-	-	-	-
Phosphoric Acid, (85%, Cold)	C	C	-	E	G	U	U	Prestone	E	E	-	-	-	-	-
Phosphoric Acid, (85%, Hot)	C	C	-	G	C	U	U	Propyl Acetate	U	U	-	-	-	-	-
Phosphorous Anhydride	U	U	-	E	-	-	E	Propyl Alcohol (Propanol)	E	E	E	E	C	E	E
Phosphorous Trichloride	U	U	-	-	-	-	-	Propyl Bromide	G	G	-	G	G	G	G
Photographic Solutions	-	-	E	E	U	U	C	Propylene Dichloride	U	U	-	-	-	-	-
Phthalic Acid	C	C	-	G	C	G	G	Pyridine	U	U	E	G	E	U	G
Phthalic Anhydride	-	-	-	E	C	G	E	Pyrogallic Acid	E	E	-	G	G	G	G
Picric Acid	G	G	E	G	U	U	E	Pyroligeneous Acid	U	U	-	-	-	-	-
Pinene	G	C	-	-	-	-	-	Pyrrrole	U	U	-	-	-	-	-
Pine Oil	G	U	E	E	C	U	E	Quench Oil	E	G	-	E	G	G	E
Pineapple Juice	E	E	-	E	C	C	E	Ref. Fuel B, (70 ISO Octane, 30 Toluene)	E	U	-	-	-	-	-
Piperidine	U	U	-	-	-	-	-	Resins & Rosins	C	C	-	E	C	E	E
Plating Solutions, Chrome	C	U	U	U	-	U	E	Roof Pitch	G	C	-	E	E	E	E
Polyvinyl Chloride	-	C	-	G	G	G	G	Rosin Emulsion	U	C	-	E	C	G	E
Potassium Acetate	G	G	-	-	E	-	-	Rosin Oil	G	G	E	E	-	E	G
Potassium Bicarbonate	E	E	E	G	E	U	U	RP-1 Fuel	G	C	-	E	E	E	E
Potassium Bichromate	E	E	-	E	-	-	-	Rubber Latex Emulsions	-	-	-	E	G	E	E
Potassium Bisulfate	G	G	-	E	-	-	G	Rubber Solvents	U	C	-	E	E	E	E
Potassium Bisulfite	E	E	-	G	U	C	C	Sal Ammoniac	E	E	-	-	-	-	-
Potassium Bromide	E	E	E	G	U	C	G	Salicylic Acid	G	C	-	E	-	-	-
Potassium Carbonate	E	E	E	G	E	U	U	Salad Oil	E	E	-	G	C	G	G
Potassium Chlorate	E	E	E	G	G	G	G	Salt Brine	E	U	-	G	U	G	G
Potassium Chloride	E	E	E	G	E	U	U	Sauerkraut Brine	-	-	-	G	-	-	-
Potassium Chromate	E	E	C	G	E	E	G	Sea Water	E	E	E	G	U	C	C
Potassium Cupro Cyanide	E	E	E	G	E	U	U	Secondary Butyl Alcohol	E	E	-	-	-	-	-
Potassium Cyanide	E	E	E	G	E	U	U	Selenic Acid	U	U	-	-	-	-	-
Potassium Dichromate	E	E	C	G	E	E	G	Sewage	E	G	-	E	E	C	C
Potassium Ferricyanide	E	E	-	E	-	-	-	Shellac	E	E	E	E	G	E	E
Potassium Ferrocyanide	E	E	E	G	-	E	G	Silicic Acid	U	U	-	-	-	-	-
Potassium Hydroxide	G	G	E	G	C	U	U	Silicone Fluids	G	G	E	G	G	G	G
Potassium Iodide	E	E	-	-	-	-	-	Silver Bromide	-	-	-	E	-	-	U
Potassium Nitrate	E	E	E	G	-	G	G	Silver Cyanide	G	G	-	E	U	U	U
Potassium Oxalate	-	-	-	E	-	-	C	Silver Nitrate	G	E	E	G	U	U	U
Potassium Perborate	E	E	-	-	-	-	-	Silver Plating Solution	E	E	E	E	-	-	-
Potassium Perchlorate	G	-	-	-	-	-	-	Soap Solutions	E	G	E	E	E	C	C
Potassium Permanganate, (Saturated to 10%)	-	-	E	E	E	C	G	Soda Ash, Sodium Carbonate	E	E	C	E	E	G	U
Potassium Permanganate, (Saturated 10-25%)	-	-	E	E	E	C	G	Sodium Acetate	G	G	E	G	C	E	G
Potassium Persulfate	E	E	-	-	-	-	-	Sodium Benzoate	E	E	-	G	-	-	G
								Sodium Bicarbonate	E	E	E	G	C	E	U

E = Excellent G = Good C = Conditional U = Unsatisfactory - = Test Data Not Available



PIPE & COUPLING

CHEMICAL RESISTANCE GUIDE

Tyler Pipe/Soil Pipe Division • 11910 CR 492 • Tyler, TX 75706 • (800) 527-8478

AGENT								AGENT							
	NITRILE	NEOPRENE	EPOXY	STAINLESS STEEL	DUCTILE/CAST IRON	BRONZE	ALUMINUM		NITRILE	NEOPRENE	EPOXY	STAINLESS STEEL	DUCTILE/CAST IRON	BRONZE	ALUMINUM
Sodium Bisulfate	E	E	E	G	U	C	U	Stannic Chloride	E	E	E	U	U	U	U
Sodium Bisulfite	E	E	E	G	U	C	U	Stannous Chloride, (Up to 15%)	E	E	E	E	U	U	U
Sodium Bisulphite, (Black Liquor)	E	E	-	E	U	G	U	Steam, (15 PSIG, 250°F)	U	U	U	E	G	-	-
Sodium Borate	E	E	E	G	C	E	C	Stearic Acid	G	G	G	E	C	C	G
Sodium Bromide	E	E	-	G	U	G	G	Stoddard Solvent	E	G	E	E	E	E	E
Sodium Carbonate	E	E	C	E	E	G	U	Styrene	U	U	E	E	G	E	E
Sodium Chlorate	E	E	E	G	C	G	C	Sucrose Solutions	E	E	E	E	G	E	E
Sodium Chloride	E	E	E	C	G	C	C	Sugar Liquid	E	E	E	E	G	E	E
Sodium Chromate	E	E	-	E	G	C	U	Sugar, Syrups & Jam	-	G	-	-	C	G	G
Sodium Cyanide	E	E	E	E	E	U	U	Sulfate, Black Liquor	C	G	E	G	C	C	C
Sodium Dichromate, (Up to 20%)	E	E	-	-	-	-	-	Sulfate, Green Liquor	C	G	E	G	C	C	G
Sodium Ferricyanide	E	E	-	E	-	-	E	Sulfate, White Liquor	C	G	E	G	C	C	G
Sodium Ferrocyanide	E	E	-	-	-	-	-	Sulfite Liquors	G	G	E	G	U	U	U
Sodium Fluoride	E	E	E	U	U	C	G	Sulfite Acid Liquor	-	-	-	-	-	-	-
Sodium Hydro Sulfide	E	E	-	-	-	C	E	Sulfonic Acid	U	U	-	-	-	-	-
Sodium Hydroxide, (20%, Cold)	E	E	-	E	E	E	U	Sulfur	U	E	-	E	E	-	-
Sodium Hydroxide, (20%, Hot)	G	G	-	E	G	E	U	Sulfur Chloride	U	U	C	U	U	U	U
Sodium Hydroxide, (50%, Cold)	E	E	-	E	G	E	U	Sulfur Dioxide, Dry	U	U	E	E	E	E	G
Sodium Hydroxide, (50%, Hot)	G	G	-	E	G	E	U	Sulfur Dioxide, Liquid	U	C	E	E	-	G	G
Sodium Hydroxide, (70%, Cold)	G	C	-	E	E	E	U	Sulfur Hexafluoride	E	G	-	E	-	G	E
Sodium Hydroxide, (70%, Hot)	U	U	-	E	G	G	U	Sulfur, Molten	U	C	-	G	G	U	E
Sodium Hypochlorite, (Up to 20%)	G	U	C	C	U	U	U	Sulfur Trioxide	U	U	-	G	G	G	-
Sodium Metaphosphate	E	G	E	E	U	C	C	Sulfur Trioxide, Dry	U	U	E	E	G	G	E
Sodium Metasilicate, Cold	G	E	-	E	C	G	G	Sulfuric Acid, (Up to 25%, 150°F Max.)	U	C	E	U	U	U	U
Sodium Metasilicate, Hot	-	-	-	E	C	G	G	Sulfuric Acid, (25-50%, 200°F Max.)	U	U	G	U	U	U	U
Sodium Nitrate	G	G	E	G	E	C	G	Sulfuric Acid, (50-95%, 150°F Max.)	U	U	C	U	U	U	U
Sodium Perborate	G	G	G	G	C	U	C	Sulfuric Acid, Fuming	U	U	U	U	U	U	U
Sodium Peroxide	G	G	C	E	C	U	C	Sulfurous Acid	G	G	E	G	U	U	C
Sodium Phosphate, Dibasic	E	G	-	C	-	-	-	Tall Oil	E	E	-	E	G	G	C
Sodium Phosphate, Monobasic	E	E	-	E	C	-	-	Tannic Acid, (All Conc., 150°F Max.)	E	E	E	E	C	E	C
Sodium Phosphate, Tribasic	E	E	-	E	C	-	-	Tanning Liquors, (50G Alum. Sol.)	G	U	-	G	-	-	E
Sodium Polyphosphate	G	U	E	G	-	C	U	Tanning Liquors, (50G Dichromate Sol.)	E	U	E	E	-	E	E
Sodium Salicylate	-	-	-	E	-	-	-	Tar, Bituminous	G	C	-	E	G	-	-
Sodium Silicate	E	E	E	E	E	E	U	Tartaric Acid	E	G	E	C	C	E	G
Sodium Silicate, Hot	-	-	-	G	C	C	C	Terephthalhalic Acid	-	-	-	-	-	-	-
Sodium Sulphate	E	E	E	G	E	C	E	Tertiary Butyl Alcohol	G	G	-	-	-	-	-
Sodium Sulphide	E	E	E	G	E	U	U	Tertiary Butyl Catechol	U	G	-	-	-	-	-
Sodium Sulfite Solutions, (Up to 20%)	E	E	E	G	E	C	C	Tertiary Butyl Mercaptan	U	U	-	-	-	-	-
Sodium Tetraborate	E	E	E	E	E	-	-	Tetrabutyl Titanate	G	G	-	-	-	-	-
Sodium Thiosulfate	G	E	E	G	C	U	G	Tetrachloroethylene	U	U	-	E	-	-	-
Sohovis 47	G	-	-	-	-	-	-	Tetraethyl Lead	G	C	-	-	-	-	-
Sohovis 78	G	-	-	-	-	-	-	Tetrafluoroethylene	-	-	-	-	-	-	-
Sovasol No. 1,2 and 3	E	G	-	-	-	-	-	Tetrahydrofuran	U	U	E	E	U	U	U
Sovasol No. 73 and 74	G	G	-	-	-	-	-	Tetralin	U	U	-	-	-	-	-
Soybean Oil	E	C	E	E	E	E	G								
Spindle Oil	E	C	-	-	-	-	-								

E = Excellent G = Good C = Conditional U = Unsatisfactory - = Test Data Not Available

CHEMICAL RESISTANCE GUIDE

Tyler Pipe/Soil Pipe Division • 11910 CR 492 • Tyler, TX 75706 • (800) 527-8478



PIPE & COUPLING

AGENT							AGENT							
	NITRILE	NEOPRENE	EPOXY	STAINLESS STEEL	DUCTILE/CAST IRON	BRONZE		ALUMINUM	NITRILE	NEOPRENE	EPOXY	STAINLESS STEEL	DUCTILE/CAST IRON	BRONZE
Thionyl Chloride	U	U	-	-	-	-	Uric Acid	-	-	-	E	-	-	U
Thiophene	U	U	-	-	-	-	Varnish	C	G	E	E	C	E	E
Titanium Tetrachloride	C	U	-	E	-	-	Vegetable Oils	E	G	E	E	E	C	E
Toluene, (30%)	C	U	G	E	E	E	Versene	-	-	-	-	-	-	-
Tomato Juice	E	E	E	E	C	C	Vinegar	G	G	E	E	C	C	G
Transformer Oil	E	G	-	E	G	G	Vinyl Acetate	U	U	-	-	-	-	-
Transmission Fluid, Type A	E	G	-	-	-	-	Vinyl Chloride	U	U	-	E	-	-	-
Triacetin	G	G	-	-	-	-	Vi-Pex	G	-	-	-	-	-	-
Tributoxy Ethyl Phosphate	U	U	-	-	-	-	Water, (Up to 120°F)	E	E	E	E	E	E	E
Tributyl Phosphate	U	U	-	-	-	-	Water, (120 F to 200°F)	C	C	E	E	E	E	E
Trichloroethane	U	U	E	E	E	E	Water, (250°F)	U	U	E	E	E	E	E
Trichloroethylene, (Up to 200°F)	C	U	C	G	C	E	Water, Acid, Mine (Oxidizing & Non-Oxidizing)	G	G	E	E	C	C	C
Trichloroacetic Acid	C	U	-	U	U	G	Water, Bromine, (Up to 150°F)	U	U	-	-	-	-	-
Tricresyl Phosphate	U	U	-	-	-	-	Water, Chlorine	C	C	-	-	-	-	-
Tri Ethylene Glycol	-	-	-	-	-	-	Water, Deionized, (Up to 150°F)	C	C	E	E	U	U	E
Tri Ethylene Glycol Butyl Ether	-	-	-	-	-	-	Water, Sewage, (Up to 120°F)	E	C	E	-	E	-	-
Tri Ethylene Glycol Ethyl Ether	-	-	-	-	-	-	Waxes	E	G	-	E	E	E	E
Triethanol Amine	C	G	-	-	-	-	Whiskey & Wines	E	E	G	E	U	C	C
Triethanolamine	C	G	-	G	-	G	White Liquor	E	E	E	E	C	U	-
Triethylamine	G	G	E	G	E	G	Wood Oil	E	G	E	E	C	U	E
Trimethyl Propane	-	-	-	-	-	-	Xylene	U	U	E	E	E	E	E
Trisodium Phosphate	E	-	-	E	C	-	Xylol, (160°F Max.)	U	U	-	-	-	-	-
Tung Oil	E	G	-	-	C	-	Zeolites	E	E	-	-	-	-	-
Turbo Oil No. 15 Diester Lubricant	G	U	-	-	-	-	Zinc Acetate	G	G	-	E	-	-	-
Turpentine	E	U	G	E	G	C	Zinc Bromide	G	G	-	G	U	G	U
Urea	C	G	-	G	C	G	Zinc Chloride, to 50%	E	E	E	U	U	U	U
							Zinc Hydrosulfite	E	E	-	E	G	C	U

E = Excellent G = Good C = Conditional U = Unsatisfactory - = Test Data Not Available