

[Polyester - Chemical Resistance](#)

Chemical resistance of Polyester to common products like Acetic acid, Diesel oil and more

Polyester resins combine excellent mechanical, electrical and thermal properties with very good chemical resistance and dimensional stability. Chemical resistance to some common products are shown in the table below.

Chemical Product	Polyester	
	60°F (15°C)	150°F (66°C)
Acetic Acid 0-25% (vinegar)	R	max 125
Acetic Acid 25-50%	R	NR
Alcohol - Butyl	NR	NR
Alcohol - Isopropyl	max 150	
Alcohol - Isopropyl 100%	NR	NR
Alcohol - Secondary Butyl	NR	NR
Alum (Aluminum Sulfate)	R	R
Aluminum Chloride	R	max 120
Aluminum Potassium Sulfate	R	R
Ammonium Bicarbonate	R	NR
Ammonium Hydroxide 5%	R	NR
Ammonium Hydroxide 10%	NR	NR
Ammonium Hydroxide 20%	NR	NR
Ammonium Nitrate	R	R
Ammonium Persulfate	NR	NR
Ammonium Phosphate	NR	NR
Ammonium Sulfate	R	R
Barium Acetate	NR	NR
Barium Carbonate	R	NR
Barium Chloride	R	max 200
Barium Sulfate	R	R
Barium Sulfide	NR	NR
Beer	R	NR
Benzoic Acid	R	NR
Benzyl Alcohol	NR	NR
Butylene Glycol	R	R
Butyric Acid 0-50%	R	NR
Cadmium Chloride	R	NR
Calcium Bisulfate	R	R
Calcium Carbonate	R	NR
Calcium Chlorate	R	R
Calcium Chloride	R	R
Calcium Hydroxide	R	NR
Calcium Hypochlorite	R	NR
Calcium Nitrate	R	R
Calcium Sulfate	R	R
Calcium Sulfite	R	R
Caprylic Acid	R	NR
Carbon Dioxide	R	R
Carbon Monoxide	R	R
Carbonic Acid	R	R
Chlorine Dioxide/Air	R	NR

Chlorine - Dry Gas	R	NR
Chlorine, Wet Gas	NR	NR
Chlorine Water	NR	NR
Chloroacetic Acid 0-50%	NR	NR
Chromium Sulfate	R	R
Citric Acid	R	R
Coconut Oil	R	NR
Copper Chloride	R	R
Copper Cyanide	NR	NR
Copper Fluoride	NR	NR
Copper Nitrate	R	R
Copper Sulfate	R	R
Corn Oil	R	NR
Corn Starch-Slurry	R	NR
Corn Sugar	R	NR
Cottonseed Oil	R	NR
Crude Oil, Sour	R	NR
Crude Oil, Sweet	R	NR
Cyclohexane	R	NR
Di-Ammonium Phosphate	NR	NR
Dibutyl Ether	NR	NR
Diesel Fuel	R	NR
Diethylene Glycol	R	NR
Dimethyl Phthalate	NR	NR
Dioctyl Phthalate	NR	NR
Dipropylene Glycol	R	NR
Ethylene Glycol	R	R
Fatty Acids	R	R
Ferric Chloride	R	R
Ferric Nitrate	R	R
Ferric Sulfate	R	R
Ferrous Chloride	R	R
Ferrous Nitrate	R	R
Ferrous Sulfate	R	R
Fluoboric Acid 10%	NR	NR
Fluosilicic Acid 0-20%	NR	NR
Formaldehyde	R	NR
Formic Acid 10%	R	NR
Fuel Oil	R	NR
Gas, Natural	R	NR
Gasoline, Auto	R	NR
Gasoline Aviation	R	NR
Gasoline, Ethyl	R	NR
Gasoline, Sour	R	NR
Glyconic, Acid	R	NR
Glucose	R	R
Glycerin	R	R
Glycol - Propylene	R	R
Glycolic Acid 70%	R	NR
Heptanes	R	NR
Hexane	R	NR
Hexalene Glycol	R	R

Hydraulic Fluid	R	NR
Hydrobromic Acid 0-25%	R	NR
Hydrocyanic Acid	R	NR
Hydrofluosilicic Acid 10%	NR	NR
Hydrogen Chloride, Wet Gas	NR	NR
Hydrogen Fluoride, Vapor	R	max 95
Hydrogen Peroxide 35%	R	max 120
Hydrogen Sulfide Dry	R	max 250
Hypochlorous Acid 0-10%	R	max 104
Isopropyl Palmitate	R	max 180
Kerosene	R	max 120
Lactic Acid	R	max 200
Lead Acetate	R	max 160
Magnesium Carbonate	R	max 160
Magnesium Chloride	R	max 220
Magnesium Nitrate	R	max 160
Magnesium Sulfate	R	max 200
Mercuric Chloride	R	max 212
Mercurous Chloride	R	max 212
Mineral Oils	R	max 180
Naphtha	R	R
Naphthalene	R	NR
Nickel Chloride	R	NR
Nickel Nitrate	R	R
Nickel Sulfate	R	R
Nitric Acid 0-5%	R	R
Octanoic Acid	R	NR
Oil, Sour Crude	R	R
Oil, Sweet Crude	R	R
Oleic Acid	R	R
Olive Oil	R	R
Oxalic Acid	R	R
Phosphoric Acid	R	R
Phosphoric Acid Fumes	R	R
Phosphorous Pentoxide	R	R
Phthalic Acid	R	R
Pickling Acids	R	R
Picric Acid, Alcoholic	R	R
Polyvinyl Acetate Latex	R	NR
Polyvinyl Alcohol	R	NR
Potassium Aluminum Sulfate	R	max 170
Potassium Bicarbonate	R	NR
Potassium Carbonate	R	NR
Potassium Chloride	R	R
Potassium Ferro cyanide	R	R
Potassium Nitrate	R	R
Potassium Permanganate	R	NR
Potassium Persulfate	R	NR
Potassium Sulfate	R	R
Pulp Paper Mill Effluent	R	NR
Pyridine	NR	NR
Silver Nitrate	R	R

Soaps	R	NR
Sodium Acetate	R	NR
Sodium Benzoate	R	NR
Sodium Bifluoride	R	NR
Sodium Bisulfate	R	R
Sodium Bisulfite	R	R
Sodium Bromide	R	R
Sodium Carbonate 0-25%	R	NR
Sodium Chlorate	R	NR
Sodium Chloride	R	NR
Sodium Chlorite 25%	R	NR
Sodium Cyanide	R	NR
Sodium Dichromate	R	R
Sodium Di-Phosphate	R	R
Sodium Ferricyanide	R	R
Sodium Hydroxide 0-5%	R	R
Sodium Hydrosulfide	R	NR
Sodium Hypochlorite	R	NR
Sodium Lauryl Sulfate	R	R
Sodium Mono-Phosphate	R	R
Sodium Nitrate	R	R
Sodium Silicate	R	NR
Sodium Sulfate	R	R
Sodium Sulfide	R	NR
Sodium Sulfite	R	NR
Sodium Tetraborate	R	R
Sodium Thiosulfate	R	NR
Sodium Tripolyphosphate	R	NR
Sodium Xylene Sulfonate	R	NR
Sodium Solutions	R	NR
Sodium Crude Oil	R	R
Soya Oil	R	R
Stannic Chloride	R	R
Stannous Chloride	R	R
Stearic Acid	R	R
Sugar, Beet and Cane Liquor	R	NR
Sugar, Sucrose	R	R
Sulfamic Acid	R	NR
Sulfated Detergents	R	NR
Sulfuric Acid 0-30%	R	R
Sulfuric Acid 30-50%	NR	NR
Sulfuric Acid 30-50%	NR	NR
Sulfuric Acid 50-70%	R	max 150
Sulfurous Acid 10%	NR	NR
Superphosphoric Acid	R	NR
Tall Oil	R	NR
Tannic Acid	R	NR
Tartaric Acid	R	R
Toluene	NR	NR
Trichloro Acetic Acid 50%	R	NR
Tridecylbenzene Sulfonate	R	NR
Trisodium Phosphate	R	NR

Urea	R	NR
Vegetable Oils	R	R
Vinegar	R	R
Water - Deionized	R	R
Water - Demineralized	R	R
Water - Distilled	R	R
Water - Fresh	R	R
Water - Salt	R	R
Water - Sea	R	R
White Liquor - Pulp Mill	R	NR
Xylene	NR	NR
Zinc Chlorate	R	R
Zinc Nitrate	R	R
Zinc Sulfate	R	R

R: Resistance, NR : Not Resistance