KELCO

CHEMICAL COMPATIBILITY CHART

EPDM

Our products can be exposed to a huge variety of chemicals. The data table below is an application guide, and indicates the resistance of the specific thermoplastics we use in the construction of our products, to common chemicals.

The data given should be used cautiously, and as a guide only. Various factors such as concentration, additives, exposure time, temperature and internal mechanical stress levels will all impact on the working life of our plastic parts.

Use the table conservatively and if any doubt exists, do not proceed with the application.

In the table below there are four ratings:

- **A-Excellent** indicates that at ambient temperature and pressure, the material should not be affected.
- **B-Good** indicates that the material is slightly affected but not to the point of being unsuitable.
- **C-Fair** indicates a degree of reaction that is generally considered unsuitable and should not be used.
- **D-Severe Effect** indicates that the material should not be used under any circumstances

All ratings are taken from data measured at ambient temperature and pressure.

CHEMICAL	COMPATIBILITY
Acetaldehyde	A-Excellent
Acetamide	A-Excellent
Acetate Solvent	A-Excellent
Acetic Acid	A-Excellent
Acetic Acid 20%	A-Excellent
Acetic Acid 80%	A-Excellent
Acetic Acid, Glacial	B-Good
Acetic Anhydride	B-Good
Acetone	A-Excellent
Acetyl Chloride (dry)	D-Severe Effect
Acetylene	A-Excellent
Acrylonitrile	D-Severe Effect
Adipic Acid	A-Excellent
Alcohols:Amyl	A-Excellent
Alcohols:Benzyl	B-Good
Alcohols:Butyl	A-Excellent
Alcohols:Diacetone	A-Excellent
Alcohols:Ethyl	A-Excellent
Alcohols:Hexyl	C-Fair
Alcohols:Isobutyl	A-Excellent
Alcohols:Isopropyl	A-Excellent
Alcohols:Methyl	A-Excellent
Alcohols:Octyl	A-Excellent
Alcohols:Propyl	A-Excellent
Aluminum Chloride	A-Excellent
Aluminum Chloride 20%	A-Excellent
Aluminum Fluoride	A-Excellent
Aluminum Hydroxide	A-Excellent
Aluminum Nitrate	A-Excellent
Aluminum Potassium Sulfate 10%	A-Excellent
Aluminum Potassium Sulfate 100%	A-Excellent
Aluminum Sulfate	A-Excellent
Alums	A-Excellent
Amines	B-Good
Ammonia 10%	A-Excellent
Ammonia Nitrate	A-Excellent
Ammonia, anhydrous	A-Excellent
Ammonia, liquid	A-Excellent
Ammonium Acetate	A-Excellent
Ammonium Bifluoride	A-Excellent
Ammonium Carbonate	A-Excellent
Ammonium Chloride	A-Excellent
Ammonium Hydroxide	A-Excellent
Ammonium Nitrate	A-Excellent
Ammonium Oxalate	A-Excellent
Ammonium Persulfate	B-Good
Ammonium Phosphate, Dibasic	A-Excellent
Ammonium Phosphate, Monobasic	A-Excellent
Ammonium Phosphate, Tribasic	A-Excellent
Ammonium Sulfate	A-Excellent
Ammonium Sulfite	A-Excellent
Ammonium Thiosulfate	A-Excellent
Amyl Acetate	A-Excellent
Amyl Alcohol	A-Excellent

Amyl Chloride	D-Severe Effect
Aniline	B-Good
Aniline Hydrochloride	B-Good
Antifreeze	A-Excellent
Antimony Trichloride	B-Good
Aqua Regia (80% HCl, 20% HNO3)	C-Fair
Arochlor 1248	B-Good
Aromatic Hydrocarbons	D-Severe Effect
Arsenic Acid	A-Excellent
Asphalt	D-Severe Effect
Barium Carbonate	A-Excellent
Barium Chloride	A-Excellent
Barium Cyanide	A-Excellent
Barium Hydroxide	A-Excellent
Barium Nitrate	A-Excellent
Barium Sulfate	A-Excellent
Barium Sulfide	A-Excellent
Beer	A-Excellent
Beet Sugar Liquids	A-Excellent
Benzaldehyde	A-Excellent
Benzene	D-Severe Effect
Benzene Sulfonic Acid	D-Severe Effect
Benzoic Acid	D-Severe Effect
Benzol	D-Severe Effect
Benzyl Chloride	D-Severe Effect
Bleaching Liquors	A-Excellent
Borax (Sodium Borate)	A-Excellent
Boric Acid	A-Excellent
Bromine	D-Severe Effect
Butadiene	C-Fair
Butane	D-Severe Effect
Butanol (Butyl Alcohol)	A-Excellent
Butter	A-Excellent
Buttermilk	A-Excellent
Butyl Ether	D-Severe Effect
Butyl Phthalate	B-Good
Butylacetate	B-Good
Butylene	D-Severe Effect
Butyric Acid	B-Good
Calcium Bisulfate	A-Excellent
Calcium Bisulfide	C-Fair
Calcium Bisulfite	D-Severe Effect
Calcium Carbonate	A-Excellent
Calcium Chlorate	A-Excellent
Calcium Chloride	A-Excellent
Calcium Hydroxide	A-Excellent
Calcium Hypochlorite	B-Good
Calcium Nitrate	A-Excellent
Calcium Oxide	A-Excellent
Calcium Sulfate	A-Excellent
Calgon	A-Excellent
Cane Juice	A-Excellent
Carbolic Acid (Phenol)	B-Good
Carbon Bisulfide	D-Severe Effect
Carbon Dioxide (dry)	B-Good

Carbon Dioxide (wet)	B-Good
Carbon Disulfide	D-Severe Effect
Carbon Monoxide	A-Excellent
Carbon Tetrachloride	D-Severe Effect
Carbon Tetrachloride (dry)	B-Good
Carbon Tetrachloride (wet)	D-Severe Effect
Carbonic Acid	B-Good
Catsup	A-Excellent
Chlorinated Glue	B-Good
Chlorine (dry)	A-Excellent
Chlorine Water	C-Fair
Chlorine, Anhydrous Liquid	B-Good
Chloroacetic Acid	B-Good
Chlorobenzene (Mono)	D-Severe Effect
Chlorobromomethane	B-Good
Chloroform	D-Severe Effect
Chlorosulfonic Acid	D-Severe Effect
Chocolate Syrup	A-Excellent
Chromic Acid 10%	C-Fair
Chromic Acid 30%	B-Good
Chromic Acid 5%	A-Excellent
Chromic Acid 50%	B-Good
Cider	A-Excellent
Citric Acid	A-Excellent
Citric Oils	B-Good
Cloroxr (Bleach)	B-Good
Coffee	A-Excellent
Copper Chloride	A-Excellent
Copper Cyanide	A-Excellent
Copper Sulfate >5%	A-Excellent
Copper Sulfate 5%	A-Excellent
Cresols	D-Severe Effect
Cresylic Acid	D-Severe Effect
Cupric Acid	A-Excellent
Cyclohexane	D-Severe Effect
Cyclohexanone	B-Good
Detergents	A-Excellent
Diacetone Alcohol	A-Excellent
Dichlorobenzene	D-Severe Effect
Diesel Fuel	D-Severe Effect
Diethyl Ether	D-Severe Effect
Diethylamine	B-Good
Diethylene Glycol	A-Excellent
Dimethyl Aniline	B-Good
Dimethyl Formamide	B-Good
Diphenyl	D-Severe Effect
Diphenyl Oxide	D-Severe Effect
Epsom Salts (Magnesium Sulfate)	A-Excellent
Ethane	D-Severe Effect
Ethanol	A-Excellent
Ethanolamine	B-Good
Ether	C-Fair
Ethyl Acetate	B-Good
Ethyl Chloride	A-Excellent
Ethyl Ether	D-Severe Effect

Ethylene Bromide	C-Fair
Ethylene Chloride	D-Severe Effect
Ethylene Chlorohydrin	B-Good
Ethylene Diamine	A-Excellent
Ethylene Dichloride	C-Fair
Ethylene Glycol	A-Excellent
Ethylene Oxide	C-Fair
Fatty Acids	D-Severe Effect
Ferric Chloride	A-Excellent
Ferric Nitrate	A-Excellent
Ferric Sulfate	A-Excellent
Ferrous Sulfate	A-Excellent
Fluoboric Acid	A-Excellent
Fluorine	A-Excellent
Fluosilicic Acid	A-Excellent
Formaldehyde 100%	A-Excellent
Formaldehyde 40%	A-Excellent
Formic Acid	A-Excellent
Freon 113	D-Severe Effect
Freon 12	B-Good
Freon 22	A-Excellent
Freon TF	D-Severe Effect
Freonr 11	D-Severe Effect
Fuel Oils	D-Severe Effect
Furan Resin	C-Fair
Furfural	D-Severe Effect
Gallic Acid	B-Good
Gasoline (high-aromatic)	D-Severe Effect
Gasoline, leaded, ref.	D-Severe Effect
Gasoline, unleaded	D-Severe Effect
Gelatin	A-Excellent
Glucose	A-Excellent
Glue, P.V.A.	A-Excellent
Glycerin	A-Excellent
Glycolic Acid	A-Excellent
Grape Juice	A-Excellent
Grease	D-Severe Effect
Heptane	D-Severe Effect
Hexane	D-Severe Effect
Honey	A-Excellent
Hydraulic Oil (Petro)	D-Severe Effect
Hydraulic Oil (Synthetic)	A-Excellent
Hydrazine	A-Excellent
Hydrobromic Acid 100%	A-Excellent
Hydrobromic Acid 20%	A-Excellent
Hydrochloric Acid 100%	D-Severe Effect
Hydrochloric Acid 20%	A-Excellent
Hydrochloric Acid 37%	C-Fair
Hydrocyanic Acid	B-Good
Hydrocyanic Acid (Gas 10%)	A-Excellent
Hydrofluoric Acid 100%	D-Severe Effect
Hydrofluoric Acid 20%	D-Severe Effect
Hydrofluoric Acid 50%	D-Severe Effect
Hydrofluoric Acid 75%	C-Fair
Hydrofluosilicic Acid 100%	A-Excellent

Hydrofluosilicic Acid 20%	A-Excellent
Hydrogen Gas	A-Excellent
Hydrogen Peroxide 10%	A-Excellent
Hydrogen Peroxide 100%	D-Severe Effect
Hydrogen Peroxide 30%	B-Good
Hydrogen Peroxide 50%	B-Good
Hydrogen Sulfide (aqua)	B-Good
Hydrogen Sulfide (dry)	B-Good
Hydroquinone	D-Severe Effect
Hydroxyacetic Acid 70%	A-Excellent
Iodine	B-Good
Iodine (in alcohol)	A-Excellent
Iodoform	A-Excellent
Isooctane	D-Severe Effect
Isopropyl Acetate	B-Good
Isopropyl Ether	D-Severe Effect
Jet Fuel (JP3, JP4, JP5)	D-Severe Effect
Kerosene	D-Severe Effect
Ketones	A-Excellent
Lacquer Thinners	D-Severe Effect
Lacquers	D-Severe Effect
Lactic Acid	A-Excellent
Lard	D-Severe Effect
Latex	A-Excellent
Lead Acetate	A-Excellent
Lead Nitrate	A-Excellent
Lead Sulfamate	A-Excellent
Ligroin	D-Severe Effect
Lime	D-Severe Effect
Linoleic Acid	D-Severe Effect
Lithium Chloride	A-Excellent
Lubricants	D-Severe Effect
Lye: Ca(OH)2 Calcium Hydroxide	A-Excellent
Lye: KOH Potassium Hydroxide	A-Excellent
Lye: NaOH Sodium Hydroxide	B-Good
Magnesium Carbonate	A-Excellent
Magnesium Chloride	A-Excellent
Magnesium Hydroxide	A-Excellent
Magnesium Nitrate	A-Excellent
Magnesium Sulfate (Epsom Salts)	A-Excellent
Maleic Acid	D-Severe Effect
Maleic Anhydride	D-Severe Effect
Malic Acid	D-Severe Effect
Manganese Sulfate	A-Excellent
Mash	A-Excellent
Melamine	A-Excellent
Mercuric Chloride (dilute)	A-Excellent
Mercuric Cyanide	A-Excellent
Mercurous Nitrate	A-Excellent
Mercury	A-Excellent
Methane	D-Severe Effect
Methanol (Methyl Alcohol)	A-Excellent
Methyl Acetate	B-Good
Methyl Acetone	A-Excellent
Methyl Acrylate	B-Good

Methyl Alcohol 10%	A-Excellent
Methyl Bromide	D-Severe Effect
Methyl Butyl Ketone	A-Excellent
Methyl Cellosolve	B-Good
Methyl Chloride	D-Severe Effect
Methyl Dichloride	D-Severe Effect
Methyl Ethyl Ketone	A-Excellent
Methyl Ethyl Ketone Peroxide	D-Severe Effect
Methyl Isobutyl Ketone	B-Good
Methyl Isopropyl Ketone	C-Fair
Methyl Methacrylate	D-Severe Effect
Methylamine	A-Excellent
Methylene Chloride	C-Fair
Milk	A-Excellent
Mineral Spirits	D-Severe Effect
Molasses	A-Excellent
Monochloroacetic acid	C-Fair
Monoethanolamine	B-Good
Morpholine	D-Severe Effect
Motor oil	D-Severe Effect
Mustard	A-Excellent
Naphtha	D-Severe Effect
Naphthalene	D-Severe Effect
Natural Gas	D-Severe Effect
Nickel Chloride	A-Excellent
Nickel Nitrate	A-Excellent
Nickel Sulfate	A-Excellent
Nitrating Acid (>15% H2SO4)	A-Excellent
Nitric Acid (20%)	A-Excellent
Nitric Acid (50%)	D-Severe Effect
Nitric Acid (5-10%)	A-Excellent
Nitric Acid (Concentrated)	D-Severe Effect
Nitrobenzene	B-Good
Nitromethane	B-Good
Nitrous Acid	A-Excellent
Nitrous Oxide	A-Excellent
Oils:Aniline	B-Good
Oils:Castor	B-Good
Oils:Citric	B-Good
Oils:Coconut	D-Severe Effect
Oils:Cod Liver	A-Excellent
Oils:Corn	C-Fair
Oils:Cottonseed	D-Severe Effect
Oils:Creosote	D-Severe Effect
Oils:Diesel Fuel (20, 30, 40, 50)	D-Severe Effect
Oils:Fuel (1, 2, 3, 5A, 5B, 6)	D-Severe Effect
Oils:Ginger	A-Excellent
Oils:Hydraulic Oil (Petro)	D-Severe Effect
Oils:Hydraulic Oil (Synthetic)	A-Excellent
Oils:Lemon	D-Severe Effect
Oils:Linseed	D-Severe Effect
Oils:Mineral	D-Severe Effect
Oils:Olive	D-Severe Effect
Oils:Palm	A-Excellent
Oils:Peanut	D-Severe Effect

Oils:Pine	D-Severe Effect
Oils:Rapeseed	A-Excellent
Oils:Silicone	A-Excellent
Oils:Soybean	C-Fair
Oils:Transformer	D-Severe Effect
Oils:Turbine	A-Excellent
Oleic Acid	B-Good
Oleum 100%	D-Severe Effect
Oleum 25%	D-Severe Effect
Oxalic Acid (cold)	A-Excellent
Ozone	A-Excellent
Palmitic Acid	B-Good
Paraffin	D-Severe Effect
Pentane	D-Severe Effect
Perchloric Acid	B-Good
Perchloroethylene	D-Severe Effect
Petrolatum	A-Excellent
Petroleum	D-Severe Effect
Phenol (10%)	B-Good
Phenol (Carbolic Acid)	B-Good
Phosphoric Acid (>40%)	B-Good
Phosphoric Acid (crude)	B-Good
Phosphoric Acid (S40%)	B-Good
Phosphorus Trichloride	A-Excellent
Photographic Developer	B-Good
Photographic Solutions	A-Excellent
Phthalic Acid	A-Excellent
Phthalic Anhydride	A-Excellent
Picric Acid	B-Good
Plating Solutions, Bronze Plating: Cu-Cd Bronze Bath R.T.	A-Excellent
Plating Solutions, Bronze Plating: Cu-Sn Bronze Bath 160°F	A-Excellent
Plating Solutions, Rhodium Plating 120°F	A-Excellent
Plating Solutions, Silver Plating 80-120°F	A-Excellent
Potash (Potassium Carbonate)	A-Excellent
Potassium Bicarbonate	A-Excellent
Potassium Bromide	A-Excellent
Potassium Chlorate	A-Excellent
Potassium Chloride	A-Excellent
Potassium Chromate	A-Excellent
Potassium Cyanide Solutions	A-Excellent
Potassium Dichromate	A-Excellent
Potassium Ferricyanide	A-Excellent
Potassium Ferrocyanide	A-Excellent
Potassium Hydroxide (Caustic Potash)	A-Excellent
Potassium Hypochlorite	A-Excellent
Potassium Iodide	A-Excellent
Potassium Nitrate	A-Excellent
Potassium Permanganate	A-Excellent
Potassium Sulfate	A-Excellent
Potassium Sulfide	A-Excellent
Propane (liquefied)	D-Severe Effect
Propylene	D-Severe Effect
Propylene Glycol	A-Excellent
Pyridine	B-Good
Pyrogallic Acid	B-Good

Resorcinal	B-Good
Rum	A-Excellent
Salicylic Acid	A-Excellent
Salt Brine (NaCl saturated)	A-Excellent
Sea Water	A-Excellent
Shellac (Bleached)	A-Excellent
Shellac (Orange)	A-Excellent
Silicone	A-Excellent
Silver Nitrate	A-Excellent
Soap Solutions	A-Excellent
Soda Ash (see Sodium Carbonate)	A-Excellent
Sodium Acetate	A-Excellent
Sodium Aluminate	A-Excellent
Sodium Benzoate	A-Excellent
Sodium Bicarbonate	A-Excellent
Sodium Bisulfate	A-Excellent
Sodium Bisulfite	A-Excellent
Sodium Borate (Borax)	A-Excellent
Sodium Bromide	A-Excellent
Sodium Carbonate	A-Excellent
Sodium Chlorate	A-Excellent
Sodium Chloride	A-Excellent
Sodium Cyanide	A-Excellent
Sodium Ferrocyanide	A-Excellent
Sodium Fluoride	A-Excellent
Sodium Hydrosulfite	B-Good
Sodium Hydroxide (20%)	B-Good
Sodium Hydroxide (50%)	B-Good
Sodium Hydroxide (80%)	B-Good
Sodium Hypochlorite (<20%)	B-Good
Sodium Hypochlorite (100%)	B-Good
Sodium Metaphosphate	A-Excellent
Sodium Metasilicate	A-Excellent
Sodium Nitrate	A-Excellent
Sodium Perborate	A-Excellent
Sodium Peroxide	A-Excellent
Sodium Polyphosphate	A-Excellent
Sodium Silicate	A-Excellent
Sodium Sulfate	A-Excellent
Sodium Sulfide	A-Excellent
Sodium Sulfite	A-Excellent
Sodium Tetraborate	A-Excellent
Sodium Thiosulfate (hypo)	A-Excellent
Stannic Chloride	A-Excellent
Stannous Chloride	C-Fair
Starch	A-Excellent
Stearic Acid	B-Good
Stoddard Solvent	D-Severe Effect
Styrene	D-Severe Effect
Sugar (Liquids)	A-Excellent
Sulfate (Liquors)	A-Excellent
Sulfur Chloride	D-Severe Effect
Sulfur Dioxide	A-Excellent
Sulfur Dioxide (dry)	A-Excellent
Sulfur Hexafluoride	B-Good

Sulfur Trioxide	C-Fair
Sulfur Trioxide (dry)	C-Fair
Sulfuric Acid (<10%)	A-Excellent
Sulfuric Acid (10-75%)	B-Good
Sulfuric Acid (75-100%)	B-Good
Sulfuric Acid (cold concentrated)	C-Fair
Sulfuric Acid (hot concentrated)	D-Severe Effect
Sulfurous Acid	B-Good
Tallow	A-Excellent
Tannic Acid	A-Excellent
Tanning Liquors	B-Good
Tartaric Acid	B-Good
Tetrachloroethane	D-Severe Effect
Tetrachloroethylene	D-Severe Effect
Tetrahydrofuran	D-Severe Effect
Tin Salts	B-Good
Toluene (Toluol)	D-Severe Effect
Tomato Juice	A-Excellent
Trichloroacetic Acid	B-Good
Trichloroethane	D-Severe Effect
Trichloroethylene	D-Severe Effect
Tricresylphosphate	A-Excellent
Triethylamine	A-Excellent
Trisodium Phosphate	A-Excellent
Turpentine	D-Severe Effect
Urea	A-Excellent
Urine	A-Excellent
Varnish	D-Severe Effect
Vegetable Juice	A-Excellent
Vinegar	A-Excellent
Vinyl Acetate	B-Good
Vinyl Chloride	C-Fair
Water, Acid, Mine	A-Excellent
Water, Deionized	A-Excellent
Water, Distilled	A-Excellent
Water, Fresh	A-Excellent
Water, Salt	A-Excellent
Whiskey & Wines	A-Excellent
Xylene	D-Severe Effect
Zinc Chloride	A-Excellent
Zinc Hydrosulfite	A-Excellent
Zinc Sulfate	A-Excellent