KELCO

CHEMICAL COMPATIBILITY CHART

HYPALON

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

Amyl Alcohol	A-Excellent
Amyl Chloride	D-Severe Effect
Aniline	D-Severe Effect
Aqua Regia (80% HCl, 20% HNO3)	C-Fair
Arochlor 1248	D-Severe Effect
Aromatic Hydrocarbons	D-Severe Effect
Arsenic Acid	A-Excellent
Asphalt	D-Severe Effect
Barium Chloride	A-Excellent
Barium Cyanide	A-Excellent
Barium Hydroxide	A-Excellent
Barium Sulfate	A-Excellent
Barium Sulfide	A-Excellent
Beer	A-Excellent
Beet Sugar Liquids	A-Excellent
Benzaldehyde	D-Severe Effect
Benzene	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	B-Good
Butane	B-Good
Butanol (Butyl Alcohol)	A-Excellent
Butter	B-Good
Butyl Phthalate	D-Severe Effect
Butylacetate	D-Severe Effect
Butylene	D-Severe Effect
Butyric Acid	D-Severe Effect
Calcium Bisulfite	A-Excellent
Calcium Carbonate	A-Excellent
Calcium Chlorate	B-Good
Calcium Chloride	A-Excellent
Calcium Hydroxide	A-Excellent
Calcium Hypochlorite	A-Excellent
Calcium Nitrate	A-Excellent
Calcium Oxide	A-Excellent
Calcium Sulfate	A-Excellent
Calgon	A-Excellent
Cane Juice	A-Excellent
Carbolic Acid (Phenol)	D-Severe Effect
Carbon Bisulfide	D-Severe Effect
Carbon Dioxide (dry)	B-Good
Carbon Dioxide (wet)	B-Good

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

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

Hydrofluoric Acid 20%	B-Good
Hydrofluoric Acid 50%	B-Good
Hydrofluoric Acid 75%	B-Good
Hydrofluosilicic Acid 100%	B-Good
Hydrofluosilicic Acid 20%	B-Good
Hydrogen Gas	A-Excellent
Hydrogen Peroxide 10%	D-Severe Effect
Hydrogen Peroxide 100%	D-Severe Effect
Hydrogen Peroxide 30%	D-Severe Effect
Hydrogen Peroxide 50%	D-Severe Effect
Hydrogen Sulfide (aqua)	D-Severe Effect
Hydrogen Sulfide (dry)	B-Good
Hydroquinone	D-Severe Effect
Iodine	D-Severe Effect
Isopropyl Acetate	D-Severe Effect
Isopropyl Ether	C-Fair
Jet Fuel (JP3, JP4, JP5)	D-Severe Effect
Kerosene	D-Severe Effect
Lacquer Thinners	D-Severe Effect
Lacquers	D-Severe Effect
Lactic Acid	A-Excellent
Lard	B-Good
Lead Acetate	D-Severe Effect
Lead Sulfamate	A-Excellent
Ligroin	C-Fair
Linoleic Acid	D-Severe Effect
Lubricants	A-Excellent
Lye: Ca(OH)2 Calcium Hydroxide	A-Excellent
Lye: KOH Potassium Hydroxide	A-Excellent
Lye: NaOH Sodium Hydroxide	A-Excellent
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
Mercuric Chloride (dilute)	A-Excellent
Mercury	A-Excellent
Methane	B-Good
Methanol (Methyl Alcohol)	A-Excellent
Methyl Acetate	D-Severe Effect
Methyl Acrylate	D-Severe Effect
Methyl Alcohol 10%	A-Excellent
Methyl Bromide	D-Severe Effect
Methyl Butyl Ketone	D-Severe Effect

Methyl Cellosolve	D-Severe Effect
Methyl Chloride	D-Severe Effect
Methyl Ethyl Ketone	D-Severe Effect
Methyl Ethyl Ketone Peroxide	D-Severe Effect
Methyl Isobutyl Ketone	D-Severe Effect
Methyl Isopropyl Ketone	D-Severe Effect
Methyl Methacrylate	D-Severe Effect
Milk	A-Excellent
Mineral Spirits	C-Fair
Monochloroacetic acid	A-Excellent
Monoethanolamine	D-Severe Effect
Naphtha	D-Severe Effect
Naphthalene	D-Severe Effect
Nickel Chloride	A-Excellent
Nickel Nitrate	D-Severe Effect
Nickel Sulfate	A-Excellent
Nitric Acid (20%)	D-Severe Effect
Nitric Acid (50%)	D-Severe Effect
Nitric Acid (5-10%)	B-Good
Nitric Acid (Concentrated)	D-Severe Effect
Nitrobenzene	D-Severe Effect
Oils:Aniline	D-Severe Effect
Oils:Castor	A-Excellent
Oils:Coconut	C-Fair
Oils:Cod Liver	B-Good
Oils:Corn	B-Good
Oils:Cottonseed	B-Good
Oils:Creosote	D-Severe Effect
Oils:Diesel Fuel (20, 30, 40, 50)	B-Good
Oils:Fuel (1, 2, 3, 5A, 5B, 6)	D-Severe Effect
Oils:Hydraulic Oil (Petro)	A-Excellent
Oils:Hydraulic Oil (Synthetic)	A-Excellent
Oils:Linseed	C-Fair
Oils:Mineral	B-Good
Oils:Olive	B-Good
Oils:Peanut	B-Good
Oils:Pine	D-Severe Effect
Oils:Rapeseed	D-Severe Effect
Oils:Silicone	A-Excellent
Oils:Soybean	C-Fair
Oils:Turbine	D-Severe Effect
Oleic Acid	C-Fair
Oleum 100%	D-Severe Effect
Oleum 25%	D-Severe Effect
Oxalic Acid (cold)	B-Good
Ozone	A-Excellent
Palmitic Acid	D-Severe Effect

Pentane	B-Good
Perchloroethylene	D-Severe Effect
Petroleum	D-Severe Effect
Phenol (10%)	D-Severe Effect
Phenol (Carbolic Acid)	D-Severe Effect
Phosphoric Acid (>40%)	B-Good
Phosphoric Acid (crude)	B-Good
Phosphoric Acid (S40%)	B-Good
Phosphorus Trichloride	D-Severe Effect
Photographic Developer	A-Excellent
Photographic Solutions	A-Excellent
Phthalic Acid	A-Excellent
Picric Acid	B-Good
Potassium Chloride	A-Excellent
Potassium Cyanide Solutions	A-Excellent
Potassium Dichromate	A-Excellent
Potassium Ferricyanide	A-Excellent
Potassium Hydroxide (Caustic Potash)	A-Excellent
Potassium Hypochlorite	A-Excellent
Potassium Iodide	A-Excellent
Potassium Nitrate	A-Excellent
Potassium Sulfate	A-Excellent
Potassium Sulfide	B-Good
Propylene	D-Severe Effect
Propylene Glycol	A-Excellent
Pyridine	D-Severe Effect
Rosins	B-Good
Rum	A-Excellent
Salicylic Acid	A-Excellent
Salt Brine (NaCl saturated)	A-Excellent
Sea Water	A-Excellent
Shellac (Bleached)	A-Excellent
Silicone	A-Excellent
Silver Nitrate	A-Excellent
Soap Solutions	A-Excellent
Soda Ash (see Sodium Carbonate)	A-Excellent
Sodium Aluminate	A-Excellent
Sodium Benzoate	B-Good
Sodium Bicarbonate	A-Excellent
Sodium Bisulfate	A-Excellent
Sodium Bisulfite	A-Excellent
Sodium Borate (Borax)	A-Excellent
Sodium Bromide	B-Good
Sodium Carbonate	A-Excellent
Sodium Chlorate	A-Excellent
Sodium Chloride	A-Excellent
Sodium Chromate	C-Fair

Sodium Cyanide	A-Excellent
Sodium Ferrocyanide	B-Good
Sodium Fluoride	B-Good
Sodium Hydrosulfite	B-Good
Sodium Hydroxide (20%)	A-Excellent
Sodium Hydroxide (50%)	A-Excellent
Sodium Hydroxide (80%)	A-Excellent
Sodium Hypochlorite (<20%)	A-Excellent
Sodium Hypochlorite (100%)	B-Good
Sodium Metaphosphate	B-Good
Sodium Metasilicate	B-Good
Sodium Nitrate	A-Excellent
Sodium Perborate	B-Good
Sodium Peroxide	B-Good
Sodium Polyphosphate	B-Good
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	C-Fair
Stannous Chloride	A-Excellent
Starch	A-Excellent
Stearic Acid	C-Fair
Styrene	D-Severe Effect
Sugar (Liquids)	A-Excellent
Sulfate (Liquors)	B-Good
Sulfur Dioxide	C-Fair
Sulfur Hexafluoride	B-Good
Sulfur Trioxide	D-Severe Effect
Sulfuric Acid (<10%)	A-Excellent
Sulfuric Acid (10-75%)	B-Good
Sulfuric Acid (75-100%)	C-Fair
Sulfuric Acid (cold concentrated)	C-Fair
Sulfuric Acid (hot concentrated)	D-Severe Effect
Sulfurous Acid	A-Excellent
Tallow	C-Fair
Tannic Acid	A-Excellent
Tanning Liquors	B-Good
Tartaric Acid	A-Excellent
Tetrachloroethane	D-Severe Effect
Tetrachloroethylene	D-Severe Effect
Tetrahydrofuran	D-Severe Effect
Tin Salts	A-Excellent
Toluene (Toluol)	D-Severe Effect
Trichloroethane	D-Severe Effect

Trichloroethylene	D-Severe Effect
Tricresylphosphate	D-Severe Effect
Turpentine	D-Severe Effect
Varnish	D-Severe Effect
Vinegar	A-Excellent
Vinyl Acetate	A-Excellent
Water, Deionized	A-Excellent
Whiskey & Wines	A-Excellent
Xylene	D-Severe Effect
Zinc Chloride	A-Excellent
Zinc Sulfate	A-Excellent