



CHEMICAL COMPATIBILITY CHART

ABS

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	D-Severe Effect
Acetic Acid	D-Severe Effect
Acetic Acid 20%	C-Fair
Acetic Acid 80%	D-Severe Effect
Acetic Acid, Glacial	D-Severe Effect
Acetic Anhydride	C-Fair
Acetone	D-Severe Effect
Acetyl Chloride (dry)	D-Severe Effect
Acrylonitrile	D-Severe Effect
Alcohols:Amyl	A-Excellent
Alcohols:BenzyI	D-Severe Effect
Alcohols:Butyl	A-Excellent
Alcohols:Ethyl	B-Good
Alcohols:Isobutyl	B-Good
Alcohols:Methyl	D-Severe Effect
Alcohols:Octyl	A-Excellent
Alcohols:Propyl	B-Good
Aluminum Chloride	A-Excellent
Aluminum Fluoride	A-Excellent
Aluminum Hydroxide	B-Good
Aluminum Sulfate	A-Excellent
Ammonia, anhydrous	D-Severe Effect
Ammonium Bifluoride	A-Excellent
Ammonium Carbonate	A-Excellent
Ammonium Chloride	A-Excellent
Ammonium Hydroxide	B-Good
Ammonium Persulfate	A-Excellent
Ammonium Phosphate, Dibasic	A-Excellent
Ammonium Sulfate	A-Excellent
Amyl Acetate	D-Severe Effect
Amyl Alcohol	A-Excellent
Amyl Chloride	D-Severe Effect
Aniline	D-Severe Effect
Aniline Hydrochloride	D-Severe Effect
Antifreeze	B-Good
Antimony Trichloride	A-Excellent
Aqua Regia (80% HCl, 20% HNO3)	D-Severe Effect
Arsenic Acid	A-Excellent
Barium Carbonate	A-Excellent
Barium Chloride	A-Excellent
Barium Hydroxide	A-Excellent
Barium Sulfate	A-Excellent
Barium Sulfide	A-Excellent
Beer	A-Excellent
Beet Sugar Liquids	B-Good
Benzaldehyde	B-Good

Benzene	D-Severe Effect
Benzol	D-Severe Effect
Benzyl Chloride	D-Severe Effect
Bromine	D-Severe Effect
Butane	B-Good
Butter	B-Good
Buttermilk	B-Good
Butyric Acid	D-Severe Effect
Calcium Chloride	B-Good
Calcium Nitrate	A-Excellent
Calcium Oxide	D-Severe Effect
Calcium Sulfate	C-Fair
Carbolic Acid (Phenol)	D-Severe Effect
Carbon Dioxide (dry)	B-Good
Carbon Dioxide (wet)	B-Good
Carbon Tetrachloride	D-Severe Effect
Carbon Tetrachloride (dry)	D-Severe Effect
Carbon Tetrachloride (wet)	D-Severe Effect
Catsup	B-Good
Chlorobenzene (Mono)	D-Severe Effect
Chloroform	D-Severe Effect
Chromic Acid 10%	B-Good
Chromic Acid 30%	B-Good
Chromic Acid 5%	B-Good
Chromic Acid 50%	D-Severe Effect
Citric Acid	D-Severe Effect
Cloroxr (Bleach)	B-Good
Copper Chloride	A-Excellent
Cresols	D-Severe Effect
Cyclohexanone	D-Severe Effect
Detergents	B-Good
Dichlorobenzene	D-Severe Effect
Dichloroethane	D-Severe Effect
Diethyl Ether	D-Severe Effect
Diethylamine	D-Severe Effect
Diethylene Glycol	B-Good
Dimethyl Aniline	D-Severe Effect
Dimethyl Formamide	D-Severe Effect
Epsom Salts (Magnesium Sulfate)	B-Good
Ethanol	B-Good
Ether	D-Severe Effect
Ethyl Acetate	D-Severe Effect
Ethyl Benzoate	D-Severe Effect
Ethyl Chloride	D-Severe Effect
Ethyl Ether	D-Severe Effect
Ethylene Bromide	D-Severe Effect
Ethylene Chloride	D-Severe Effect

Ethylene Chlorohydrin	D-Severe Effect
Ethylene Diamine	D-Severe Effect
Ethylene Dichloride	D-Severe Effect
Ethylene Glycol	A-Excellent
Ethylene Oxide	D-Severe Effect
Fatty Acids	A-Excellent
Ferric Chloride	A-Excellent
Ferric Nitrate	A-Excellent
Ferric Sulfate	A-Excellent
Ferrous Chloride	A-Excellent
Ferrous Sulfate	A-Excellent
Fluoboric Acid	A-Excellent
Fluorine	A-Excellent
Fluosilicic Acid	A-Excellent
Formaldehyde 100%	B-Good
Formaldehyde 40%	A-Excellent
Formic Acid	D-Severe Effect
Freon 12	A-Excellent
Freonr 11	D-Severe Effect
Fruit Juice	B-Good
Fuel Oils	D-Severe Effect
Furfural	D-Severe Effect
Gasoline (high-aromatic)	D-Severe Effect
Gasoline, leaded, ref.	D-Severe Effect
Gasoline, unleaded	D-Severe Effect
Glucose	B-Good
Glycerin	C-Fair
Glycolic Acid	B-Good
Grape Juice	B-Good
Heptane	D-Severe Effect
Hexane	D-Severe Effect
Hydrobromic Acid 100%	B-Good
Hydrochloric Acid 100%	A-Excellent
Hydrochloric Acid 20%	A-Excellent
Hydrochloric Acid 37%	A-Excellent
Hydrocyanic Acid	B-Good
Hydrofluoric Acid 100%	D-Severe Effect
Hydrofluoric Acid 20%	C-Fair
Hydrofluoric Acid 50%	C-Fair
Hydrofluoric Acid 75%	C-Fair
Hydrogen Peroxide 10%	A-Excellent
Hydrogen Peroxide 100%	A-Excellent
Hydrogen Sulfide (aqua)	B-Good
Hydroquinone	D-Severe Effect
Ink	A-Excellent
Iodine	D-Severe Effect
Kerosene	D-Severe Effect

Ketones	A-Excellent
Lacquer Thinners	A-Excellent
Lacquers	A-Excellent
Lactic Acid	D-Severe Effect
Latex	B-Good
Lead Acetate	B-Good
Lead Nitrate	B-Good
Linoleic Acid	A-Excellent
Lye: KOH Potassium Hydroxide	A-Excellent
Lye: NaOH Sodium Hydroxide	C-Fair
Magnesium Carbonate	B-Good
Magnesium Chloride	B-Good
Magnesium Hydroxide	B-Good
Magnesium Nitrate	B-Good
Magnesium Sulfate (Epsom Salts)	B-Good
Manganese Sulfate	B-Good
Mercuric Chloride (dilute)	B-Good
Mercuric Cyanide	B-Good
Mercurous Nitrate	C-Fair
Mercury	B-Good
Methanol (Methyl Alcohol)	D-Severe Effect
Methyl Acetate	D-Severe Effect
Methyl Alcohol 10%	D-Severe Effect
Methyl Bromide	D-Severe Effect
Methyl Chloride	D-Severe Effect
Methyl Ethyl Ketone	D-Severe Effect
Methyl Isobutyl Ketone	D-Severe Effect
Methylamine	D-Severe Effect
Methylene Chloride	D-Severe Effect
Milk	B-Good
Mineral Spirits	D-Severe Effect
Molasses	B-Good
Morpholine	C-Fair
Motor oil	C-Fair
Mustard	B-Good
Naphtha	D-Severe Effect
Naphthalene	D-Severe Effect
Natural Gas	B-Good
Nickel Chloride	A-Excellent
Nickel Nitrate	A-Excellent
Nickel Sulfate	B-Good
Nitric Acid (20%)	B-Good
Nitric Acid (50%)	C-Fair
Nitric Acid (5-10%)	B-Good
Nitric Acid (Concentrated)	D-Severe Effect
Nitrobenzene	D-Severe Effect
Nitromethane	D-Severe Effect

Nitrous Acid	D-Severe Effect
Oils:Aniline	D-Severe Effect
Oils:Castor	A-Excellent
Oils:Citric	D-Severe Effect
Oils:Coconut	A-Excellent
Oils:Cod Liver	A-Excellent
Oils:Corn	B-Good
Oils:Cottonseed	A-Excellent
Oils:Fuel (1, 2, 3, 5A, 5B, 6)	D-Severe Effect
Oils:Lemon	C-Fair
Oils:Mineral	A-Excellent
Oils:Olive	A-Excellent
Oils:Palm	A-Excellent
Oils:Peppermint	D-Severe Effect
Oils:Pine	D-Severe Effect
Oils:Sesame Seed	A-Excellent
Oils:Silicone	A-Excellent
Oils:Soybean	A-Excellent
Oils:Sperm (whale)	A-Excellent
Oleic Acid	D-Severe Effect
Oleum 100%	D-Severe Effect
Oxalic Acid (cold)	A-Excellent
Ozone	B-Good
Palmitic Acid	A-Excellent
Paraffin	A-Excellent
Perchloroethylene	D-Severe Effect
Petroleum	B-Good
Phenol (10%)	D-Severe Effect
Phenol (Carbolic Acid)	D-Severe Effect
Phosphoric Acid (>40%)	C-Fair
Phosphoric Acid (crude)	C-Fair
Phosphoric Acid (molten)	D-Severe Effect
Phosphoric Acid (S40%)	B-Good
Phosphorus Trichloride	D-Severe Effect
Photographic Developer	B-Good
Phthalic Acid	B-Good
Phthalic Anhydride	B-Good
Picric Acid	A-Excellent
Potash (Potassium Carbonate)	A-Excellent
Potassium Bicarbonate	A-Excellent
Potassium Bromide	A-Excellent
Potassium Chlorate	A-Excellent
Potassium Chloride	A-Excellent
Potassium Cyanide Solutions	A-Excellent
Potassium Dichromate	B-Good
Potassium Ferricyanide	B-Good
Potassium Hydroxide (Caustic Potash)	A-Excellent

Potassium Iodide	B-Good
Potassium Nitrate	B-Good
Potassium Permanganate	B-Good
Potassium Sulfate	B-Good
Potassium Sulfide	B-Good
Propylene	B-Good
Propylene Glycol	B-Good
Resorcinal	A-Excellent
Salicylic Acid	A-Excellent
Silicone	D-Severe Effect
Silver Nitrate	B-Good
Soap Solutions	A-Excellent
Soda Ash (see Sodium Carbonate)	B-Good
Sodium Acetate	B-Good
Sodium Benzoate	A-Excellent
Sodium Bicarbonate	A-Excellent
Sodium Bisulfate	A-Excellent
Sodium Bisulfite	A-Excellent
Sodium Borate (Borax)	A-Excellent
Sodium Bromide	B-Good
Sodium Carbonate	B-Good
Sodium Chlorate	A-Excellent
Sodium Chloride	A-Excellent
Sodium Cyanide	A-Excellent
Sodium Fluoride	A-Excellent
Sodium Hydroxide (20%)	B-Good
Sodium Hydroxide (50%)	A-Excellent
Sodium Hydroxide (80%)	A-Excellent
Sodium Hypochlorite (<20%)	B-Good
Stoddard Solvent	B-Good
Sugar (Liquids)	B-Good
Sulfur Dioxide	D-Severe Effect
Sulfuric Acid (<10%)	B-Good
Sulfuric Acid (10-75%)	B-Good
Toluene (Toluol)	D-Severe Effect
Tomato Juice	B-Good
Trichloroethylene	D-Severe Effect
Trichloropropane	D-Severe Effect
Tricresylphosphate	B-Good
Trisodium Phosphate	B-Good
Turpentine	D-Severe Effect
Urea	B-Good
Vegetable Juice	B-Good
Vinegar	A-Excellent
Vinyl Chloride	D-Severe Effect
Water, Acid, Mine	B-Good
Water, Distilled	B-Good

Water, Fresh	A-Excellent
Whiskey & Wines	C-Fair
Xylene	D-Severe Effect
Zinc Chloride	A-Excellent
Zinc Hydrosulfite	A-Excellent
Zinc Sulfate	A-Excellent