

## **A Rough Guide to Chemical Resistance**

The list below is a rough guide on the behavior of some plastics' resistance to chemicals at room temperature.

**Beware:** Plastic can be resistance to some chemicals, but may not if it is immersed in each of them, one after the other or as a mixture.

**This information may be considered as a basis for discussion and not as a guarantee.  
Materials and Products should be tested as close to the exact intended service conditions to determine their suitability for a particular purpose.**

**R = Recommended**

**NR = Not recommended**

**Q = Questionable**

**- = No data**

**Beware:** Temperatures, Concentration, Time, ESCR, Mechanical load, Moulded-in stress.

CHEMICAL	POM	PA	PET/PBT	TPC-ET	PP	PE
Acetic Acid (100%)	NR	NR	NR	Q	R	R
Acetone	R	R	-	-	R	R
Alcohol (All Types)	R	R	-	-	R	R
Ammonia (10%)	R	R	-	-	R	R
Benzene	R	R	R	Q	R	R
Brake Fluid	R	R	R	Q	R	R
Carbon Dioxide	R	R	R	R	R	R
Carbon Disulfide	Q	Q	Q	Q	Q	Q
Chloroacetic Acid (50%)	NR	NR	NR	NR	R	-
Chlorine Gas	NR	NR	NR	NR	NR	NR
Chlorine Water max .5ppm	R	R	Q	Q	R	-
Chlorobenzene	R	R	NR	NR	NR	NR
Chloroform	R	R	NR	NR	NR	NR
Chromic Acid - 50%	NR	NR	NR	NR	R	R
Citric Acid	R	R	R	R	R	R
Cresol (Metacresol)	Q	NR	NR	NR	R	-
Cyclohexane	R	R	R	R	NR	NR
Detergents	R	R	R	R	R	R
Ethyl Acetate	R	R	NR	Q	R	Q
Ethyl Ether	R	R	R	R	NR	NR
Ethylene Glycol	R	R	R	R	R	R
Formaldehyde (37%)	R	R	R	Q	R	R
Formic Acid	NR	NR	R	NR	R	R
Fuel Oil	R	R	R	R	R	R

CHEMICAL	POM	PA	PET/PBT	TPC-ET	PP	PE
Gasoline	R	R	R	R	Q	Q
Glucose	R	R	R	R	R	R
Glycerol	R	R	R	R	R	R
Heptane	R	R	R	R	NR	NR
Hexane	R	R	R	R	R	NR
Hydrochloric Acid (20%)	NR	NR	Q	Q	R	R
Hydrofluoric Acid (35%)	NR	NR	NR	NR	R	R
Hydrogen Fluoride (Anhydrous)	NR	NR	NR	NR	R	-
Hydrogen Peroxide (30%)	NR	NR	R	Q	R	R
Hydrogen Sulphide	R	R	R	R	R	R
Iodine (Wet)	-	NR	-	-	NR	-
Isoctane	R	R	R	R	R	-
Kerosene (Jet Fuel)	R	R	R	R	R	Q
Lactic Acid (80%)	R	NR	Q	R	R	R
Lead Acetate	R	R	-	-	R	R
Lubricating Oil	R	R	R	R	R	R
Mercuric Chloride	R	NR	-	-	R	R
Methyl Chloride	R	R	-	-	NR	NR
Methylene Chloride	R	NR	NR	NR	R	NR
Methyl Ethyl Ketone	R	R	NR	Q	R	NR
Mineral Oil	R	R	R	R	R	R
Mineral Spirits	R	R	R	R	R	-
Motor Oil	R	R	R	R	R	R
Naphtha	R	R	R	R	R	NR
Nitric Acid (30%)	NR	NR	NR	NR	R	R
Nitric Acid (50%)	NR	NR	NR	NR	R	R
Nitric Acid (Fuming)	NR	NR	NR	NR	NR	-
Nitrobenzene	R	NR	R	NR	R	NR
Nitrous Acid	NR	NR	NR	NR	NR	-
Nitrous Oxide (dry)	NR	NR	R	-	R	-
Oils Vegetable	R	R	R	R	R	R
Oleic Acid	R	R	R	R	R	R
Oxalic Acid (50%)	NR	NR	R	-	R	R
Ozone, ppm range	R	R	R	R	NR	R
Palmitic Acid	R	R	R	R	R	-
Perchloric Acid (10%)	NR	NR	NR	NR	R	R
Perchloric Acid (70%)	NR	NR	Q	-	R	R
Perchloroethylene	R	R	Q	NR	NR	-
Phenol (10%)	Q	NR	NR	NR	R	-
Phosphoric Acid (30%)	NR	NR	Q	-	R	R

CHEMICAL	POM	PA	PET/PBT	PTC-ET	PP	PE
Plating Solutions:						
Brass	Q	-	-	-	R	R
Cadmium	Q	R	-	-	R	R
Chrome	Q	R	-	-	R	-
Copper	Q	R	-	-	R	R
Gold	Q	R	-	-	R	R
Lead	Q	R	-	-	R	R
Nickel	Q	R	-	-	R	R
Rhodium	Q	R	-	-	R	R
Silver	Q	R	-	-	R	R
Tin	Q	R	-	-	R	R
Zinc	NR	NR	-	-	R	R
Phtalic Acid	R	R	R	Q	R	R
Polyvinyl Acetate	R	R	R	-	R	-
Silver Nitrate	NR	R	-	-	R	R
Sulfamic Acid (20%)	NR	NR	-	-	R	-
Sulfur Chloride	NR	NR	-	-	NR	-
Sulfur Dioxide	NR	R	-	Q	R	-
Sulfuric Acid (60%)	NR	NR	NR	NR	R	R
Tetrahydrofuran	R	R	R	Q	-	NR
Toluene	R	R	R	Q	Q	NR
Tributyl Phosphate	R	R	-	-	R	-
Trichloroacetic Acid	NR	NR	NR	NR	R	-
Trichloroethylene	R	R	NR	NR	NR	NR
Turpentine	R	R	R	-	R	NR
Urea	R	R	R	-	R	R
Vinegar	NR	NR	R	R	R	R
White Spirit	R	R	R	-	R	NR
Zinc Chloride/Sulfate	NR	NR	R	R	R	R