Chemical Compatibility Chart for Plazit-Polygal PLAZCRYL PMMA Sheets

PLAZIT POLYGAL
The Plastic Sheets Group

The chemical resistance table gives an indication of the chemical resistance of PLAZCRYL to a range of common chemicals, judged by visual examination of small unstressed samples immersed in various liquids at 20oc.

PLAZCRYL PMMA sheets have good resistance to water, alkalis, aqueous inorganic salt solutions and most common dilute acids. Some substances do not produce any effect on PMMA, some cause staining, swelling, crazing, weakening or dissolve it completely. The chemical stability depends on many factors such as concentration of the chemical agents, internal stresses and on expose temperature.

The resistance of PMMA sheets is indicated in the table below.

Chemical	Concentration	Compliance
Acetaldehyde		Dissolved
Acetic acid		Dissolved
Acetic acid	10%, aqueous	Not affected
Acetic anhydride		Affected
Acetone		Dissolved
Acetonitrile	Aqueous	Dissolved
Ammonia		Dissolved
Ammonium chloride	Saturated	Affected
Amyl acetate		Dissolved
Aniline		Dissolved
Benzaldehyde		Dissolved
Benzene		Dissolved
Benzyl alcohol		Dissolved
Butyl acetate		Dissolved
Butyl alcohol		Dissolved
Calcium chloride	Saturated	Not affected
Carbon dioxide		Not affected
Carbon disulfide		Dissolved
Carbon tetrachloride		Dissolved
Chlorine	2%, aqueous	Affected
Chlorine	Gas	Not affected
Chlorine	Conc.	Not affected
Chlorobenzene		Dissolved
Chloroform	Saturated	Dissolved
Chromic acid	10%, aqueous	Not affected
Chromic acid		Dissolved
Citric acid		Not affected
Cyclohexane		Dissolved
Cyclohexanone		Dissolved
Dibutyl phthalate		Affected
Dichloride		Dissolved
Diesel oil		Not affected
Diethyl ether		Dissolved
Dioctyl phthalate		Affected

Chemical	Concentration	Compliance
Epichlorohydrin		Dissolved
Ethyl acetate		Dissolved
Ethyl alcohol	10%, aqueous	Not affected
Ethyl alcohol	50%, aqueous	Affected
Ethyl alcohol		Dissolved
Ethyl dichloride	90%, aqueous	Dissolved
Ethylene glycol		Not affected
Formaldehyde	40%, aqueous	Not affected
Formic acid	10%, aqueous	Not affected
Formic acid		Dissolved
Glycerin		Not affected
Hexane		Not affected
Hydrochloric acid		Not affected
Hydrofluoric acid	90%, aqueous	Dissolved
Hydrogen peroxide	10%, aqueous	Not affected
Hydrogen peroxide		Dissolved
Isopropyl alcohol	Up to 30%	Dissolved
Isopropyl alcohol	50%, aqueous	Affected
Lactic acid		Not affected
Lanoline		Not affected
Methyl alcohol		Dissolved
Methyl alcohol	50%, aqueous	Affected
Methyl alcohol	10%, aqueous	Not affected
Methyl ethyl ketone		Dissolved
Methyl salicylate		Dissolved
Nitric acid	95%	Dissolved
Nitric acid	10%, aqueous	Not affected
Nitrobenzene	98%, aqueous	Not affected
Nitrogen		Affected
n-octane		Not affected
Olive oil		Not affected
Oxygen		Not affected
Paraffin		Dissolved

Chemical	Concentration	Compliance
Phosphoric acid		Dissolved
Phosphoric acid	10%, aqueous	Not affected
Potassium hydroxide	Saturated	Not affected
Salt water		Not affected
Silicone F110		Affected
Silicone F130		Affected
Silicone R220		Not affected
Sodium carbonate	Saturated	Not affected
Sodium chlorate	40%, aqueous	Not affected
Sodium hydroxide	Saturated	Not affected

Chemical	Concentration	Compliance
Sodium thiosulfate		Not affected
Sulfuric acid		Dissolved
Sulfuric acid	30%, aqueous	Affected
Sulfuric acid	10%, aqueous	Not affected
Tetrahydrofuran		Dissolved
Tetraline		Dissolved
Toluene		Dissolved
Trichloroethane		Dissolved
Trichloroethylene		Dissolved
Turpentine oil		Not affected
Water		Not affected
Xylene		

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