

# Chemical Compatibility Chart for Plazit-Polygal PLAZGAL SAN Sheets

This table gives an indication of the chemical resistance of PLAZGAL SAN sheets to a range of common chemicals at 20°C.

PLAZGAL SAN sheets can be safely used with most chemicals and components such as alkalis and diluted acids, as well as with aqueous salt solutions. However, SAN has limited resistance to alcohols, aliphatic hydrocarbons, oils and fats, and is not resistant to concentrated mineral acids, aromatic and/or halogenated hydrocarbons, esters, ethers, ketones.

Important note: the chemical stability of PLAZGAL SAN sheets depends on many factors such as the concentration of the chemical agent, internal stresses in the sheets and exposure temperature, in certain situations the sheets can develop stress cracks when even when exposed to chemicals to which SAN is usually resistant.

The resistance of PLAZGAL SAN sheets is indicated in the table below.

Chemical	Concentration	Compliance
Aqua Regia		Dissolved
Acetic acid	To 50%	Not affected
Acetic acid	100%	Affected
Acetone		Affected
Acetylsalicylic acid	(soln.)	Not affected
Allyl alcohol		Affected
Almond, bitter, oil of		Not affected
Aluminium chloride	(soln.)	Not affected
Aluminium sulfate	(soln.)	Not affected
Ammonia, aqueous	25%	Not affected
Ammonium carbonate	(soln.)	
Not affected		
Amyl acetate		Affected
Barium chloride	(soln.)	Not affected
Barium bromide	(soln.)	Not affected
Barium carbonate	(soln.)	Not affected
Benzaldehyde		Affected
Benzene		Affected
Benzole acid		Not affected
Benzyl acetate		Affected
Benzyl alcohol		Affected
Bismuth chloride	(soln.)	Not affected
Bismuth subnitrate	(soln.)	Not affected
Borax	(soln.)	Not affected
Boric acid	(soln.)	Not affected
Butane		Not affected
Bromine	liquid	Affected

Chemical	Concentration	Compliance
Brake fluids (ATE)		Affected
Butter		Not affected
Butyl acetate		Affected
Butyric acid		Affected
Cadmium bromide	(soln.)	Not affected
Caffeine	(soln.)	Not affected
Calcium bromide	(soln.)	Not affected
Calcium chloride	(soln.)	Not affected
Calcium hypochlorite	(solid)	Not affected
Calcium hypochlorite	(soln.)	Not affected
Calcium oxide		Not affected
Camphor		Not affected
Carbon dioxide		Not affected
Carbon sulfide		Affected
Carnauba wax		Not affected
Castor oil		Not affected
Cetyl alcohol		Not affected
Chlorinated lime		Not affected
Chloroform		Affected
Chlorine	(liquid or gaseous)	Affected
Chlorine water		Dissolved
Chloroacetic acid		Dissolved
Chlorobenzene		Affected
Citronella, oil of		Affected
Chromosulfuric acid		Affected
Chlorosulfonic acid		Affected
Cider (apple)		Not affected
Cinnamic aldehyde		Affected

Chemical	Concentration	Compliance
Citric acid	(soln.)	Not affected
Coconut oil		Not affected
Copper Sulfate	(soln.)	Not affected
Chromic acid	(soln.)	Affected
Cod-liver oil		Not affected
Cloves, oil of		Not affected
Coffee extract		Not affected
Cottonseed oil		Not affected
Cresol	(para)	Dissolved
Cyclohexane		Not affected
Cyclohexanol		Not affected
Cyclohexanone		Dissolved
Dairy products		Not affected
Dehydroacetic acid		
Not affected		
Diacetone alcohol		Affected
Dibutyl phthalate		Affected
Dichlorobenzene		Affected
Diesel fuel		Not affected
Diethanolamine		Not affected
Diethyl ether		Affected
Diethyl hexyl phthalate		Not affected
Diethyl ketone		Not affected
Diethyl phthalate		Affected
Diethylene glycol		Not affected
Disodecyl phthalate		Affected
Dimethyl phthalate		Affected
Dimethylformamide		Affected
Dinonyl phthalate		Dissolved
Dioxane	(1,4 dioxane)	Affected
Diphenyl ether		Affected
Diphenylamine		
Affected		
Ethanol	To 95%	Not affected
Ether (Diethyl ether)		Affected
Ethyl Acetate		Affected
Ethyl chloride		Affected
Ethylbenzol		Affected
Ethylene chloride		Affected
Ethylene glycol		Not affected
Eucalyptus, oil of		Not affected
Fertilizer salts		Not affected
Formaldehyde	30%	Not affected
Formic acid	To 40%	Not affected
Formic acid	To 85%	Dissolved
Freon 11		Dissolved
Freon 22		Dissolved
Furfural		Affected
Furfuryl alcohol		Dissolved

Chemical	Concentration	Compliance
Gallic acid		Not affected
Gasoline		Dissolved
Glucose	(30 %)	Not affected
Glycerin		Not affected
Grapefruit juice		Not affected
Gravy		Not affected
Heptane		Dissolved
Heptyl alcohol		Not affected
Hexachlorobenzene		Not affected
Hexane		Dissolved
Hexanetriol		Not affected
Hexanol		Not affected
Honey		Not affected
Household deter-gent	(soln.)	Not affected
Hydrochloric acid		Not affected
Hydrofluoric acid	To 40%	Not affected
Hydrogen Dioxide (peroxide)	30%	Not affected
Hydrogen sulfide		Not affected
Hydroquinone	(soln.)	Not affected
Hydroxyacetone		Dissolved
Ink, writing		Not affected
Iodine, tincture of		Dissolved
Iron (II) chloride	(solid)	Not affected
Iron (II) sulfate	(solid)	Not affected
Iron ammonium sulfate		Not affected
Iron nitrate (soln.)		Not affected
Isoamyl alcohol		Not affected
Isobutanol		Dissolved
Isooctane		Not affected
Isopropanol		Dissolved
Isopropyl acetate		Affected
Lactic acid	To 80 %	Not affected
Lactose	(soln.)	Not affected
Lanolin		Not affected
Lauryl alcohol		Not affected
Lead sulfate	(soln.)	Not affected
Magnesium bromide		Not affected
Magnesium carbonate		Not affected
Magnesium chloride	(soln.)	Not affected
Magnesium sulfate	(soln.)	Not affected
Maize oil		Not affected
Malic acid	(10%)	Not affected
Mercury chloride	(soln.)	Not affected
Methanol		Dissolved
Methyl acetate		Affected
Methyl butanol		Not affected

Chemical	Concentration	Compliance
Methyl chloride		Affected
Methyl cyclohexane		Not affected
Methyl ethyl ketone		Affected
Methyl isobutyl ketone		Affected
Methyl isopropyl ketone		Affected
Methyl propyl ketone		Affected
Methyl salicylate		Affected
Methylene chloride		Affected
Methylene chloro-bromide		Affected
Milk		Not affected
Motor oil (automotive)		Not affected
n-Butanol		Not affected
n-Nonanol		Not affected
n-Octanol		Not affected
n-Propanol		Not affected
Naphthalene	(solid)	Not affected
Naphthalene	(soln. in ethanol)	Dissolved
Nickel sulfate	(soln.)	Not affected
Nitric acid	(30 %)	Not affected
Nitric acid	(conc.)	Affected
Nitrobenzene		Affected
Oleic acid		Not affected
Olive oil		Not affected
Orange, oil of		Not affected
Oxalic acid	(soln.)	Not affected
Ozone	(<0,5 ppm)	Not affected
Palm oil		Not affected
Palmitic acid		Not affected
Paraffin oil		Not affected
Peanut oil		Not affected
Pectin	(soln.)	Not affected
Pentane		Dissolved
Peppermint, oil of		Affected
Perchloroethylene		Affected
Petroleum ether		Dissolved
Petroleum jelly		Dissolved
Phenacetin		Not affected
Phenol		Affected
Phenylethanol		Affected
Phosphoric acid	(to 85 %)	Not affected
Phthalic acid	(soln.)	Not affected
Potassium aluminum		Not affected
Potassium bisulfate		Not affected
Potassium bromate (soln.)		Not affected
Potassium bromide (soln.)		Not affected

Chemical	Concentration	Compliance
Potassium chloride (soln.)		Not affected
Potassium chromate (soln.)		Not affected
Potassium dichromate (soln.)		Not affected
Potassium ferricyanide		Not affected
Potassium fluoride	(soln.)	Not affected
Potassium hydroxide		Not affected
Potassium iodate	(soln.)	Not affected
Potassium iodide	(soln.)	Not affected
Potassium nitrate	(soln.)	Not affected
Potassium permanganate	(soln.)	Not affected
Potassium persulfate	(soln.)	Not affected
Potassium sulfate	(soln.)	Not affected
Potassium sulfide	(soln.)	Not affected
Propane	(liquid)	Not affected
Propylene chloride		Affected
Propylene glycol		Not affected
Salicylic acid	(soln.)	Not affected
Sea water		Not affected
Sebacic acid dibutyl ester		Affected
Silicone fluid		Not affected
Silver nitrate	(soln.)	Not affected
Sodium acetate	(soln.)	Not affected
Sodium benzoate	(soln.)	Not affected
Sodium bicarbonate	(soln.)	Not affected
Sodium bisulfite	(soln.)	Not affected
Sodium borate	(soln.)	Not affected
Sodium bromate	(soln.)	Not affected
Sodium bromide	(soln.)	Not affected
Sodium carbonate	(soln.)	Not affected
Sodium chloride	(soln.)	Not affected
Sodium chloride	(dry, soln.)	Not affected
Sodium chromate	(soln.)	Not affected
Sodium hydrogen sulfite		Not affected
Sodium hydroxide	To 50%	Not affected
Sodium hypochlorite	(soln., 12 % chlorine)	Not affected
Sodium nitrate		Not affected

Chemical	Concentration	Compliance
Sodium nitrite		Not affected
Sodium perborate	(soln.)	Not affected
Sodium phosphate	(sec., soln., tert.)	Not affected
Sodium sulfate	(soln.)	Not affected
Sodium sulfide	(soln.)	Not affected
Sodium sulfite	(soln.)	Not affected
Sodium thiosulfate	(soln.)	Not affected
Soy oil		Not affected
Stearic acid		Not affected
Strontium bromide		Not affected
Strychnine		Not affected
Sugar	(soln., 30 %)	Not affected
Sulfur		Not affected
Sulfur hexafluoride		Not affected
Sulfuric acid	To 50%	Not affected
Sulfuric acid	Conc.	Affected
Trichloroethane		Affected
Tetrachloromethane		Affected
Tetrahydrofuran		Affected
Tetrahydrofurfural		Affected
Tetralin (R)		Affected
Thionyl chloride		Affected
Thiophene		Affected
Thymol		Affected
Toluene		Affected
Tomato juice		Not affected

Chemical	Concentration	Compliance
Transformer oil		Not affected
Trichlorobenzene		Affected
Trichloroethane		Affected
Trichloroethylene		Affected
Trichlorophenol		Affected
Tricresyl phosphate		Affected
Triethanolamine		Not affected
Triethylene glycol		Not affected
Triglycol acetate		Affected
Trypaflavin (R)		Not affected
Tryptophane (d or l)		Not affected
Turpentine		Dissolved
Tung Oil	pure	Not affected
Urea	(soln.)	Not affected
Urotropin	(soln.)	Not affected
Undecyl Alcohol	pure	Not affected
Valerian drop		Not affected
Verbena oil		Dissolved
Vinegar		Not affected
Water		Not affected
Wax (bleached)		Not affected
White oil		Not affected
Xylene		Affected
Zinc bromide		Not affected
Zinc carbonate		Not affected
Zinc chloride	(soln.)	Not affected
Zinc nitrate		Not affected
Zinc oxide		Not affected
Zinc stearate		Not affected
Zinc sulfate	(soln.)	Not affected