



# Chemical Resistance

CHEMICALS	23°C 73°F	100°C 212°F	200°C 392°F	CHEMICALS	23°C 73°F	100°C 212°F	200°C 392°F
<b>ACIDS</b>				Phosphoric Acid, 80% Con	E	E	-
Acetic Acid Conc.	E	E	E	Phthalic Acid	E	E	-
Acetic Acid Glacial	E	E	-	Picric Acid	E	E	-
Acetic Acid, Conc.	E	E	E	Silicic Acid	E	E	-
Acrylic Acid	E	E	-	Sulfuric Acid, <40% Conc.	E	A	A
Aqua Regia	E	E	-	Sulfuric Acid, 50% Conc.	E	A	A
Benzene Sulfonic Acid	E	-	-	Sulfurous Acid Conc.	D	D	D
Benzoic Acid	E	E	-	Tannic Acid, 10% Conc.	E	E	-
Boric Acid	E	E	-	Tartaric Acid	E	E	-
Carbolic Acid	E	E	-	Trifluoromethyl Sulfonic	D	D	D
Carbonic Acid	E	E	-	<b>ALCOHOLS</b>			
Chloroacetic Acid	E	E	-	Benzyl Alcohol	E	E	-
Chlorosulfonic Acid	D	D	D	Butanol	E	-	-
Chromic Acid, 40% Conc.	E	E	-	Cyclohexanol	E	-	-
Chromic Acid, Conc.	E	-	-	Ethanol	E	E	-
Citric Acid	E	E	-	Ethylene Glycol	E	E	E
Formic Acid	E	E	-	Ethylene Glycol, 50% Conc.	E	E	E
Hydrobromic Acid 48% Conc.	E	E	-	Glycerol	E	E	A
Hydrochloric Acid, 10% Conc.	E	E	-	Gylcols	E	E	-
Hydrochloric Acid, Conc.	E	A	-	Isopropanol	E	A	-
Hydrofluoric Acid, Conc.	E	E	-	Methanol	E	E	-
Lactic Acid	E	E	-	Propanol	E	-	-
Maleic Acid	E	E	-	<b>ALDEHDES/KETONES</b>			
Nitric Acid, 10% Conc.	E	E	-	Acetaldehyde	E	E	-
Nitric Acid, 30% Conc.	E	A	-	Acetone	E	E	-
Nitric Acid, 40% Conc.	E	A	-	Benzaldehyde	E	E	-
Nitric Acid, Conc.	A	A	-	Cyclohexanone	E	-	-
Nitrous Acid, 10%	E	E	-	Formaldehyde	E	E	-
Oleic Acid	E	-	-	Formalin	E	-	-
Oleum	D	D	D	Ketones	E	-	-
Oxalic Acid	E	E	-	Methylethyl Ketone (MEK)	E	E	D
Perchloric Acid	E	E	-	N-Methyl-2-Pyrrolidone (NMP)	E	E	-
Phosphoric Acid, 10% Conc.	E	E	E	<b>BASES</b>			
Phosphoric Acid, 50%	E	E	E	Ammonia 880	E	-	-
				Ammonia Anhydrous	E	E	E
				Ammonia Liquid	E	E	E

**E:** Excellent, No attack, Very less or no absorption

**A:** Good, Slight attack

**D:** Severe attack. G-PAEK polymer should not be used for any application where these chemicals are present

R&D CENTRE/MARKETING DIVISION: GHARDA CHEMICALS LTD, B-27/29, PHASE-1 MIDC, DOMBIVLI (EAST), MUMBAI- 421203,

INDIA, TEL: +91-251-2803382-86 FAX: +91-251-2432640, Email: polymer@gharda.com



# Chemical Resistance

CHEMICALS	23°C 73°F	100°C 212°F	200°C 392°F
Ammonium hydroxide, 20% Conc.	E	-	-
Ammonium Hydroxide, Conc.	E	-	-
Calcium Hydroxide	E	-	-
Hydrazine	E	E	-
Hydroxides	E	-	-
Magnesium Hydroxide	E	-	-
Potassium Hydroxide, 20% Conc.	E	-	-
Potassium Hydroxide, 60% Conc.	E	-	-
Sodium Hydroxide, 20% Conc.	E	E	E
Sodium Hydroxide, 60% Conc.	E	E	E
Sodium Hydroxide, Conc. 1 N KOH sol <sup>n</sup> at reflux	E	E	-
<b>ETHERS</b>			
Diethylether	E	E	-
Dioxane	E	-	-
Ether	E	E	-
Ethylene Oxide (Eto)	E	-	-
Tetrahydrofuran	E	-	-
<b>ESTERS</b>			
Aliphatic Esters	E	E	-
Amyl Acetate	E	E	-
Butyl Acetate	E	A	-
Dibutyl Phthalate	E	-	-
Dimethyl Phthalate	E	-	-
Diocetyl Phthalate	E	-	-
Ethyl Acetate	E	E	-
Oils (Di-Ester, Ester Based)	E	E	-
<b>HALOGENATED ORGANICS</b>			
1,1,1 Trichloroethane (Genklene1)	E	-	-
1,2 Dichloroethane	E	-	-
Carbon Tetrachloride	E	E	-

CHEMICALS	23°C 73°F	100°C 212°F	200°C 392°F
Chorobenzene	E	E	-
Chloroform	E	E	-
Dibromoethane	E	-	-
Dichlorobenzene	E	-	-
Dichloroethane	E	-	-
Ethylene Dichloride	E	-	-
Freon2 11 Trichlorofluoromethane	E	-	-
Freon 113 Trichlorotrifluoroethane	E	-	-
Freon 114 1,1 Dichloro	E	-	-
1,2,2,2 Tetrafluoroethane	E	-	-
Freon 12 Dichlorodifluoromethane	E	-	-
Freon 22 Chlorodifluoromethane	E	E	-
Freon 134a	E	-	-
Freon 502	E	E	-
Methylene Chloride	E	-	-
Methylene Dichloride	E	-	-
Perchloroethylene	E	E	-
Trichloroethylene	E	E	-
<b>HYDROCARBONS</b>			
Acetylene	E	E	-
Aromatic Solvents	E	E	-
Aviation Hydraulic Fluid	E	-	-
Benzene	E	E	-
Brake Fluid (Mineral)	E	E	E
Brake Fluid	E	E	E
Butane	E	-	-
Crude Oil	E	-	-
Cyclohexane	E	E	-
Diesel Oil	E	-	-
Dowtherm3A	E	-	A
Dowtherm G	E	-	A
Dowtherm HT	E	-	A
Dowtherm LF	E	-	A
Ethane	E	-	-

**E:** Excellent, No attack, Very less or no absorption

**A:** Good, Slight attack

**D:** Severe attack. G-PAEK polymer should not be used for any application where these chemicals are present

R&D CENTRE/MARKETING DIVISION: GHARDA CHEMICALS LTD, B-27/29, PHASE-1 MIDC, DOMBIVLI (EAST), MUMBAI- 421203,

INDIA, TEL: +91-251-2803382-86 FAX: +91-251-2432640, Email: polymer@gharda.com



# Chemical Resistance

CHEMICALS	23°C 73°F	100°C 212°F	200°C 392°F
Fuel Oil	E	-	-
Gas (Manufacture d)	E	-	-
Gas (Natural)	E	-	-
Gasoline	E	E	-
Heptane	E	-	-
Hexane	E	-	-
Hydraulic Fluid	E	-	-
Iso-Octane	E	-	-
Kerosene	E	-	-
Lubricating Oil	E	-	-
Methane (Gas)	E	E	E
Motor Oil	E	E	E
Naphtha	E	E	-
Naphthalene	E	E	-
Oils (Petroleum)	E	E	-
Oils (Vegetable)	E	E	-
Pentane	E	-	-
Petroleum Ether	E	-	-
Propane	E	-	-
Skydrol Hydraulic Fluid	E	-	-
Styrene (Liquid)	E	-	-
Toluene	E	-	-
Transformer Oil	E	E	-
Vaseline5	E	-	-
Xylene	E	-	-
<b>INORGANICS</b>			
Aluminum Chloride	E	E	-
Aluminum Sulfate	E	E	-
Alum, Saturated	E	E	-
Ammonium Chloride, 10% Conc.	E	E	-
Ammonium Nitrate	E	E	-
Antimony Trichloride	E	E	-
Barium Salts (Chloride, Sulfide)	E	-	-
Bleach	E	E	-
Brine	E	E	-
Bromine	D	D	D

CHEMICALS	23°C 73°F	100°C 212°F	200°C 392°F
Bromine (Dry)	D	D	D
Bromine (Wet)	D	D	D
Bromine Water, Saturated	E	E	E
Calcium Bisulfide	E	E	-
Calcium Carbonate	E	-	-
Calcium Chloride	E	E	-
Calcium Hypochlorite	E	E	-
Calcium Nitrate	E	-	-
Calcium Sulfate	E	E	-
Carbon Dioxide (Dry)	E	-	-
Carbon Monoxide (Gas)	E	E	E
Chlorine	E	E	-
Copper Acetate	E	E	-
Copper Carbonate	E	E	-
Copper Chloride	E	E	-
Copper Cyanide	E	E	-
Copper Fluoride	E	E	-
Ethylene Nitrate	E	-	-
Ferric Chloride	A	A	-
Ferric Nitrate	E	-	-
Ferric Oxide	E	E	-
Ferric Sulfate	E	-	-
Ferrous Chloride	E	-	-
Ferrous Nitrate	E	-	-
Ferrous Sulfate	E	E	-
Fluorine	D	D	D
Hydrogen Peroxide	E	E	-
Hydrogen Sulfide (Gas)	E	E	E
Iodine	E	-	-
Lead Acetate	E	E	-
Lime	E	E	-
Magnesium Chloride	E	E	-
Magnesium Sulfate	E	E	-
Mercuric Chloride	E	E	-
Mercurous Chloride	E	E	-
Mercury	E	-	-
Nickel Acetate	E	E	-
Nickel Chloride	E	E	-

**E:** Excellent, No attack, Very less or no absorption

**A:** Good, Slight attack

**D:** Severe attack. G-PAEK polymer should not be used for any application where these chemicals are present

R&D CENTRE/MARKETING DIVISION: GHARDA CHEMICALS LTD, B-27/29, PHASE-1 MIDC, DOMBIVLI (EAST), MUMBAI- 421203,

INDIA, TEL: +91-251-2803382-86 FAX: +91-251-2432640, Email: polymer@gharda.com



# Chemical Resistance

CHEMICALS	23°C 73°F	100°C 212°F	200°C 392°F	CHEMICALS	23°C 73°F	100°C 212°F	200°C 392°F
Nickel Nitrate	E	E	-	Sodium Sulfit	E	E	-
Nickel Salts	E	-	-	Sodium (Hot)	B	D	D
Nickel Sulfate	E	E	-	Stannic Chloride	E	E	
Nitrogen	E	-	-	Stannous Chloride	E	E	E
Nitrous Oxide	E	-	-	Steam	E	E	-
Oxygen	E	-	-	Sulfites	E	E	-
Ozone	E	A	-	Sulfur	E	E	-
Phosphorous Chlorides	E	E	-	Sulfur Chloride	E	E	-
Phosphorous Pentoxide	E	E	-	Sulfur Dichloride	E	E	-
Potassium Aluminum Sulfate	E	E	-	Sulfur Dioxide	E	E	E
Potassium Bicarbonate	E	-	-	Sulfur Hexafluoride (Gas)	E	-	-
Potassium Bromide	E	E	-	Sulfur Trioxide	E	E	-
Potassium Carbonate	E	-	-	Tar	E	-	-
Potassium Chlorate	E	E	-	Tetraethyl Lead	E	-	-
Potassium Chloride	E	E	-	Water, Distilled	E	E	E
Potassium Dichromate	E	-	-	Water	E	E	-
Potassium Ferricyanide	E	-	-	Water, Sea/Salt	E	E	-
Potassium Hydroxide	E	E	-	Zinc Chloride	E	E	-
Potassium Nitrate	E	E	-	Zinc Sulfate	E	E	-
Potassium Permanganate	E	-	-	<b>MISCELLANEOUS</b>			
Potassium Sulfate	E	E	-	Adhesives (not cyanoacrylates)	E	-	-
Potassium Sulfide	E	-	-	Apple Juice	E	-	-
Silicone Fluids	E	E	-	Aviation Spirit	E	-	-
Silver Nitrate	E	-	-	Beer	E	E	-
Sodium Acetate	E	-	-	Cooking Oil	E	-	-
Sodium Bicarbonate	E	-	-	Creosote	E	-	-
Sodium Carbonate	E	E	-	Detergent Solutions (non-phenolic)	E	E	-
Sodium Chlorate	E	E	-	Edible Fats & Oils	E	-	-
Sodium Chloride	E	E	-	Fatty Acids	E	E	-
Sodium Hypochlorite	E	E	-	Fruit Juice	E	E	-
Sodium Nitrite	E	-	-	Gelatin	E	E	-
Sodium Peroxide	E	E	-	Ketchup	E	-	-
Sodium Salts	E	-	-	Linseed Oil	E	-	-
Sodium Silicate	E	E	-	Milk	E	E	-
Sodium Sulfate	E	E	-	Mineral Oil	E	-	-
Sodium Sulfide	E	E	-				

**E:** Excellent, No attack, Very less or no absorption

**A:** Good, Slight attack

**D:** Severe attack. G-PAEK polymer should not be used for any application where these chemicals are present

R&D CENTRE/MARKETING DIVISION: GHARDA CHEMICALS LTD, B-27/29, PHASE-1 MIDC, DOMBIVLI (EAST), MUMBAI- 421203,

INDIA, TEL: +91-251-2803382-86 FAX: +91-251-2432640, Email: polymer@gharda.com



# Chemical Resistance

CHEMICALS	23°C 73°F	100°C 212°F	200°C 392°F
Molasses	E	E	-
Olive Oil	E	E	-
Peanut Oil	E	E	-
Paraffin	E	E	-
Sewage	E	E	-
Soap Solution	E	-	-
Starch	E	E	-
Tallow	E	-	-
Turpentine	E	E	-
Urea	E	-	-
Varnish	E	E	-
Vinegar	E	E	-
Wax	E	-	-
White Spirit	E	-	-
Wines and Spirits	E	-	-
Yeast	E	E	-

CHEMICALS	23°C 73°F	100°C 212°F	200°C 392°F
<b>ORGANO-NITROGENS</b>			
Acetonitrile	E	A	-
Aniline	E	A	-
Dimethyl Formamide (DMF)	E	-	-
Diethylamine	E	-	-
Nitrobenzene	E	A	-
Pyridine	E	E	-
<b>PHENOLS</b>			
Phenol (Conc.)	D	D	D
Phenol (Dilute)	E	-	-
<b>SULFUR COMPOUNDS</b>			
Carbon Disulfide A A	E	E	-
Dimethylsulfoxide (DMSO)	A	A	-
Diphenylsulfone (DPS)	A	D	D
Ethylene Sulfate	E	-	-

THE INFORMATION PROVIDED IN THIS DATA SHEET CORRESPONDS TO OUR KNOWLEDGE ON THE SUBJECT AT THE DATE OF ITS PUBLICATION. THIS INFORMATION MAY BE SUBJECT TO REVISION AS NEW KNOWLEDGE AND EXPERIENCE BECOMES AVAILABLE. THE DATA PROVIDED FALL WITHIN THE NORMAL RANGE OF PRODUCT PROPERTIES AND RELATE ONLY TO THE SPECIFIC MATERIAL DESIGNATED; THESE DATA MAY NOT BE VALID FOR SUCH MATERIAL USED IN COMBINATION WITH ANY OTHER MATERIALS, ADDITIVES OR PIGMENTS OR IN ANY PROCESS, UNLESS EXPRESSLY INDICATED OTHERWISE. THE DATA PROVIDED SHOULD NOT BE USED TO ESTABLISH SPECIFICATION LIMITS OR USED ALONE AS THE BASIS OF DESIGN; THEY ARE NOT INTENDED TO SUBSTITUTE FOR ANY TESTING YOU MAY NEED TO CONDUCT TO DETERMINE FOR YOURSELF THE SUITABILITY OF A SPECIFIC MATERIAL FOR YOUR PARTICULAR PURPOSES. SINCE GHARDA PLASTICS CANNOT ANTICIPATE ALL VARIATIONS IN ACTUAL END-USE CONDITIONS GHARDA PLASTICS MAKES NO WARRANTIES AND ASSUMES NO LIABILITY IN CONNECTION WITH ANY USE OF THIS INFORMATION. NOTHING IN THIS PUBLICATION IS TO BE CONSIDERED AS A LICENSE TO OPERATE UNDER OR A RECOMMENDATION TO INFRINGE ANY PATENT RIGHTS. GHARDA PLASTICS ADVISES YOU TO SEEK INDEPENDENT COUNSEL FOR A FREEDOM TO PRACTICE OPINION ON THE INTENDED APPLICATION OR END-USE OF OUR PRODUCTS. FOR FURTHER INFORMATION, PLEASE CONTACT YOUR GHARDA PLASTICS REPRESENTATIVE

**E:** Excellent, No attack, Very less or no absorption

**A:** Good, Slight attack

**D:** Severe attack. G-PAEK polymer should not be used for any application where these chemicals are present

R&D CENTRE/MARKETING DIVISION: GHARDA CHEMICALS LTD, B-27/29, PHASE-1 MIDC, DOMBIVLI (EAST), MUMBAI- 421203,

INDIA, TEL: +91-251-2803382-86 FAX: +91-251-2432640, Email: polymer@gharda.com