

PEEK GF30 3000x500x16 mm beige

Article No. P1500953

1. Technical Data Sheet

Property	Value	Unit	Test standard
Density	1.51	g/cm ³	ISO 1183
Water absorption to saturation	0.3	%	ISO 62
Tensile Strength	105	MPa	ISO 527
Modulus of elasticity (tensile)	6380	MPa	ISO 527
Breakdown Voltage	180	MPa	ISO 527
Break Elongation	2.7	%	ISO 527
Flexural Strength	164	MPa	ISO 178
Impact Resistance (Charpy)	32	kJ/m ²	ISO 179
Hardness Shore D	90	° Shore D	ISO 868
Melting point	341	°C	DIN EN ISO 11357
Maximal operating temperature (short-term)	300	°C	
Maximum Operating Temperature	260	°C	
Heat deflection temperature (HDT/A)	328	°C	ISO 75
Vicat softening temperature (VST/B/50)	50	°C	ISO 306
Thermal Conductivity	0.35	W/(m·K)	ISO 22007-4
Thermal Expansion Coefficient	0.38	10 ⁻⁴ /K	ISO 11359
Dielectric Strength	20	kV/mm	IEC 60243-1
Volume Resistivity	10 ¹³	Ω	IEC 60093
Dielectric Constant (1 MHz)	1	-	IEC 60250
Dielectric loss factor (1 MHz)	0.0	-	IEC 60250
Surface Resistivity	10 ¹³	Ω	IEC 60093
Flammability Classification (UL 94)	0		UL 94

2. Chemical Resistance

● Resistant ● Partially resistant ● Not resistant

Chemical	Concentration	Resist.
1,4-Dioxane	100	●
2-Hydroxypropionic acid (lactic acid)	90	●
Acetic acid	100	●
Acetone	100	●
Ammonia	—	●
Ammonium chloride	—	●
Amyl alcohol	—	●
Apple juice	—	●
Benzene	—	●
Boric acid	100	●
Brake fluid	—	●
Butyl acetate	—	●
Calcium chloride	—	●
Carbon tetrachloride	—	●
Chlorine (gas)	100	●
Chlorobenzene	100	●
Chloroform	—	●
Citric acid	10	●
Cyclohexanone	100	●
Cyclohexene	100	●
Diesel	—	●
Diethylene oxide	—	●
Ethyl acetate	100	●
Ethyl alcohol (ethanol)	96	●
Ethylene chloride	100	●
Food oil	—	●
Formaldehyde (aqueous)	40	●
Formic acid	10	●
Frost protection agent	—	●
Fuel oil	—	●
Fuel, aromatic free	—	●
Glycerine	100	●

Chemical	Concentration	Resist.
Glycol	100	●
Heptane	100	●
Hydrochloric acid	10	●
Hydrochloric acid (concentrated)	—	●
Hydrofluoric acid	40	●
Hydrogen peroxide	10	●
Hydrogen sulfide (aqueous)	—	●
Isopropyl alcohol	100	●
Linseed oil	—	●
Mercurochrome	—	●
Methyl alcohol (methanol)	100	●
Methyl ethyl ketone (MEK)	100	●
Methylene chloride	100	●
Milk	—	●
Mineral oils (aromatic free)	—	●
Nitric acid	50	●
Nitric acid	10	●
Nitrobenzene	—	●
Oxalic acid	—	●
Ozone (gas)	—	●
Paraffin oil	100	●
Perchloroethylene	—	●
Petroleum	100	●
Petroleum ether	100	●
Phenol (aqueous)	9	●
Phosphoric acid	50	●
Potassium hydroxide solution	50	●
Premium fuel	—	●
Propyl alcohol	—	●
Pyridine	—	●
Silicone oil	—	●
Sodium carbonate (aqueous)	—	●

Chemical	Concentration	Resist.
Sodium chloride (aqueous)	–	●
Sodium hydrogen sulfite	–	●
Sodium hydroxide solution (caustic soda)	60	●
Sodium hydroxide solution (caustic soda)	15	●
Sodium nitrate (aqueous)	–	●
Sodium thiosulfate	–	●
Sulphuric acid	96	●
Tetrahydrofuran (THF)	100	●
Toluene	100	●
Transformer oil	–	●
Trichloroethylene	100	●
Vinegar (standard)	5-10	●
Water	–	●
Xylene	–	●