

POM C FG 32/20x3000 mm black

Article No. P1007107

1. Technical Data Sheet

Property	Value	Unit	Test standard
Density	1.24	g/cm ³	ASTM D792
Water absorption to saturation	2.2	%	ASTM D955
Water Absorption to Saturation	0.5	%	ASTM D570
Tensile Strength	51	MPa	DIN EN ISO 527-2
Modulus of elasticity (tensile)	1200	MPa	ASTM D790
Breakdown Voltage	76.5	MPa	ISO 527
Break Elongation	300	%	ASTM D638
Flexural Strength	58	MPa	ASTM D638
Notched impact strength (Charpy)	6	kJ/m ²	DIN EN ISO 179-1
Impact Resistance (Charpy)	19	kJ/m ²	ISO 179/1eU
Hardness Shore D	83	° Shore D	ISO 868
Ball pressure hardness	230	MPa	ISO 2039-1
Melting point	222	°C	ISO 3146
Maximal operating temperature (short-term)	129	°C	UL746B
Maximum Operating Temperature	90	°C	
Minimum temperature	-46.25	°C	
Heat deflection temperature (HDT/A)	105	°C	ASTM D648
Heat deflection temperature (HDT/B)	155	°C	ISO 75
Vicat softening temperature (VST/B/50)	50	°C	ISO 306
Thermal Conductivity	0.3	W/(m·K)	DIN 52612
Thermal Expansion Coefficient	0.4	10 ⁻⁴ /K	ISO 11359
Dielectric Strength	85	kV/mm	IEC 60243-1
Volume Resistivity	10 ¹²	Ω	IEC 60093
Dielectric Constant (1 MHz)	3.7	-	IEC 60250
Dielectric loss factor (1 MHz)	0.0	-	IEC 60250

Property	Value	Unit	Test standard
Dielectric loss factor (100 Hz)	0.0	-	IEC 60250
Surface Resistivity	10 ¹³	Ω	IEC 60093
Comparative Tracking Index (CTI)	600	V	IEC 60112
Flammability Classification (UL 94)	60695		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	conc.	●
Ammonium chloride	—	●
Amyl alcohol	—	●
Apple juice	—	●
Benzene	—	●
Bleaching solution	12.5 cl	●
Boric acid	100%	●
Brake fluid	—	●
Butyl acetate	—	●
Calcium chloride	—	●
Carbon disulphide	100%	●
Carbon tetrachloride	—	●
Chlorobenzene	100%	●
Chloroform	—	●
Citric acid	10%	●
Cyclohexanone	100%	●
Cyclohexene	100%	●
Diesel	—	●
Diethylene oxide	—	●
Ethyl acetate	100%	●

Chemical	Concentration	Resist.
Ethyl alcohol (ethanol)	96%	●
Food oil	—	●
Formaldehyde, aqueous	40%	●
Formic acid	10%	●
Frost protection agent	—	●
Fuel oil	—	●
Fuel, aromatic free	—	●
Glycerine	100%	●
Glycol	100%	●
Heptane	100%	●
Hydrochloric acid	10%	●
Hydrochloric acid (concentrated)	conc.	●
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	10%	●
Nitric acid (50%)	50%	●
Nitrobenzene	—	●
Oxalic acid	—	●
Ozone (gas)	≤0.5 ppm	●
Paraffin oil	100%	●
Perchloroethylene	—	●
Petroleum	100%	●
Petroleum ether	100%	●

Chemical	Concentration	Resist.
Phenol, aqueous	ca. 9%	●
Phosphoric acid	50%	●
Potassium hydroxide solution	50%	●
Premium fuel	—	●
Propyl alcohol	—	●
Silicone oil	—	●
Sodium carbonate, aqueous	—	●
Sodium chloride, aqueous	—	●
Sodium hydrogen sulfite	—	●
Sodium hydroxide solution (15%)	15%	●
Sodium hydroxide solution (60%)	60%	●
Sodium nitrate, aqueous	—	●
Sulphuric acid	96%	●
Tetrahydrofuran (THF)	100%	●
Toluene	100%	●
Transformer oil	—	●
Trichloroethylene	100%	●
Vinegar, standard	5-10%	●
Water	—	●
Xylene	—	●