POM C 300/150x1000 mm black

Article No.	P1005688

1. Technical Data Sheet

Property	Value	Unit	Test standard
Density	1.24	g/cm³	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/m²	DIN EN ISO 179-1
Impact Resistance (Charpy)	19	kJ/m²	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	–	🟢