

PMMA E 90/84x2000 mm transparent

Article No. P1200745

1. Technical Data Sheet

Property	Value	Unit	Test standard
Density	1.19	g/cm ³	ISO 1183
Water absorption to saturation	2.1	%	ISO 62
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Tensile Strength	72	MPa	ISO 527
Modulus of elasticity (tensile)	3300	MPa	ISO 527-2
Breakdown Voltage	70	MPa	ISO 527-2
Break Elongation	5	%	ISO 527-2
Flexural Strength	75	MPa	ISO 527-2
Notched impact strength (Charpy)	1.6	kJ/m ²	ISO 179/1eA
Impact Resistance (Charpy)	15	kJ/m ²	ISO 179/1eU
Hardness Shore D	15	° Shore D	
Rockwell hardness	100	M-scale	ISO 2039-2
Ball pressure hardness	175	MPa	ISO 2039-1
Melting point	160	°C	ISO 3146
Maximal operating temperature (short-term)	107.5	°C	UL746B
Maximum Operating Temperature	75	°C	
Minimum temperature	-40	°C	
Heat deflection temperature (HDT/A)	95	°C	ISO 75
Heat deflection temperature (HDT/B)	100	°C	ISO 75
Vicat softening temperature (VST/B/50)	103	°C	ISO 306
Thermal Conductivity	0.19	W/(m·K)	DIN 52612
Thermal Expansion Coefficient	0.0	10 ⁻⁴ /K	DIN 11359
Dielectric Strength	30	kV/mm	IEC 60243-1
Volume Resistivity	10 ¹⁵	Ω·cm	IEC 60093
Dielectric Constant (1 MHz)	1	-	IEC 60250

Property	Value	Unit	Test standard
Dielectric Constant (100 Hz)	2.7	-	DIN 53483-2
Dielectric loss factor (1 MHz)	0.03	-	IEC 60250
Dielectric loss factor (100 Hz)	0.06	-	DIN 53483-2
Surface Resistivity	10 ¹³	Ω	IEC 60093
Comparative Tracking Index (CTI)	600	V	IEC 60112

2. Chemical Resistance

● Resistant ● Partially resistant ● Not resistant

Chemical	Concentration	Resist.
Acetic acid	100%	●
Acetone	100%	●
Ammonia	conc.	●
Amyl alcohol	—	●
Apple juice	—	●
Benzene	—	●
Butyl acetate	—	●
Calcium chloride	—	●
Carbon disulphide	100%	●
Carbon tetrachloride	—	●
Chlorine gas	100%	●
Chloroform	—	●
Citric acid	10%	●
Cresol	—	●
Cyclohexanone	100%	●
Cyclohexene	100%	●
Diesel	—	●
Diethylene oxide	—	●
Ethyl acetate	100%	●
Ethyl alcohol (ethanol)	96%	●
Ethylene chloride	100%	●
Formaldehyde, aqueous	40%	●
Formic acid	10%	●

Chemical	Concentration	Resist.
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%	●
Phenol, aqueous	ca. 9%	●
Phosphoric acid	50%	●
Potassium hydroxide solution	50%	●
Premium fuel	—	●
Silicone oil	—	●

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