

PMMA TRANSPARENT

Physical	Nominal Value Unit	Test Method
Density	1.18 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR)	2.2 g/10 min	ISO 1133
Molding Shrinkage	0.40 to 0.70%	ISO 294-4
Water Absorption (Equilibrium, 23°C, 50% RH)	0.30%	ISO 62
Mechanical	Nominal Value Unit	Test Method
Tensile Stress (Yield)	83.0 MPa	ISO 527-2
Tensile Strain (Yield)	5.0%	ISO 527-2
Flexural Modulus	3200 MPa	ISO 178
Flexural Strength	115 MPa	ISO 178
Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength	2.0 kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength	20 kJ/m ²	ISO 179/1eU
Notched Izod Impact Strength	2.0 kJ/m ²	ISO 180/1A
Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (M-Scale)	98	ISO 2039-2
Ball Indentation Hardness (H 961/30)	185 MPa	ISO 2039-1
Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature		
0.45 MPa, Unannealed	105°C	ISO 75-2/B
1.8 MPa, Unannealed	102°C	ISO 75-2/A
Vicat Softening Temperature		
-	117°C	ISO 306/A
-	109°C	ISO 306/B
CLTE-Flow	0.000071 cm/cm/°C	ASTM E831
Flammability	Nominal Value Unit	Test Method
Flame Rating - UL	HB	UL 94
Glow Wire Flammability Index	650°C	IEC 60695-2-12
Optical	Nominal Value Unit	Test Method
Refractive Index	1.490	ISO 489
Transmittance	92.0%	ASTM D1003
Haze	0.40%	ASTM D1003

PMMA SATIN

Physical	Nominal Value Unit	Test Method
Density	1.15 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/3.8 kg)	0.80 g/10 min	ISO 1133
Molding Shrinkage - Flow	0.20 to 0.80%	ASTM D955
Water Absorption (Equilibrium, 23°C, 50% RH)	0.36%	ISO 62
Mechanical	Nominal Value Unit	Test Method
Tensile Stress (Yield, 23°C)	38.0 MPa	ISO 527-2
Tensile Strain (Break, 23°C)	40%	ISO 527-2
Flexural Modulus (23°C)	1700 MPa	ISO 178
Flexural Strength (23°C)	62.0 MPa	ISO 178
Compressive stress (23°C)	45.0 MPa	ISO 604
Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength (23°C)	7.0 kJ/m ²	ISO 179/2C
Charpy Unnotched Impact Strength (23°C)	60 kJ/m ²	ISO 179/2U
Notched Izod Impact Strength (23°C)	6.3 kJ/m ²	ISO 180/1A
Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (M-Scale)	46	ASTM D785
Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature		
0.45 MPa, Unannealed	93.0°C	ISO 75-2/B
1.8 MPa, Unannealed	88.0°C	ISO 75-2/A
Vicat Softening Temperature	100°C	ISO 306/B
CLTE-Flow (-30 TO 23°C)	0.00010 cm/cm/°C	ASTM D696
Specific Heat	2090 J/kg/°C	
Electrical	Nominal Value Unit	Test Method
Surface Resistivity	> 1.0E + 14 ohms	ASTM D257
Volume Resistivity	> 1.0E + 15 ohm cm	ASTM D257
Dielectric Strength	15 kV/mm	ASTM D149
Dielectric Constant (60 Hz)	3.90	ASTM D150
Dissipation Factor (1 MHz)	0.040	ASTM D150
Flammability	Nominal Value Unit	Test Method
Flame Rating - UL	HB	UL 94
Optical	Nominal Value Unit	Test Method
Refractive Index ²	1.490	ISO 489
Transmittance	90.0%	ASTM D1003
Haze	2.0%	ASTM D1003

DISCLAIMER

The above data sheet have been provided by the raw material manufacturer.

The values quoted are the average of results obtained under laboratory conditions and are given only as an indication to enable customers to make best use of semi-finished products.

PTH GROUP does not take any responsibility for the accuracy of the statements made by the raw material manufacturer.

PTH GROUP accepts only responsibility for the quality of it's products in accordance with it's own standard terms and conditions.