SUMIPEX® ME

PMMA — Sumitomo Chemical Co., Ltd.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	**4.2**	g/10min	ISO 1133
Temperature	**230**	°C	-
Load	**3.8**	kg	-
Molding shrinkage, parallel	**0.4**	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Stress at break	**76**	MPa	ISO 527
Strain at break	**4**	%	ISO 527
Flexural modulus, 23°C	**3100**	MPa	ISO 178
Charpy notched impact strength, +23°C	**1.4**	kJ/m²	ISO 179/1eA
Rockwell hardness	**M 95**	-	ISO 2039-2

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**99**[ann.]	°C	ISO 75-1/-2
Vicat softening temperature, B	**108**	°C	ISO 306
Coeff. of linear therm. expansion, parallel	**70**	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	**HB**	class	IEC 60695-11-10

ann.: annealed

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	**3.1**	-	IEC 62631-2-1
Volume resistivity	**>1E13**	Ohm*m	IEC 62631-3-1
Surface resistivity	**>1E15**	Ohm	IEC 62631-3-2
Electric strength	**20**	kV/mm	IEC 60243-1

Optical properties	Value	Unit	Test Standard
ISO Data			
Haze	**0.5**	-	ISO 14782
Luminous transmittance	**92**	%	ISO 13468-1, -2

Other properties	Value	Unit	Test Standard
Water absorption	**0.3**	%	Sim. to ISO 62
Density	**1190**	kg/m³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**80 - 90**	°C	-
Pre-drying - Time	**4 - 6**	h	-
Mold temperature	**60 - 85**	°C	-
Zone 1	**220**	°C	-
Zone 2	**230 - 260**	°C	-
Zone 3	**240 - 260**	°C	-
Screw speed	**40 - 60**	rpm	-
Injection pressure	**140 - 160**	MPa	-
Back pressure	**0.9 - 1.4**	MPa	-
Holding pressure	**20 - 80**	MPa	-

Characteristics

Processing

Injection Molding

Chemical Resistance

Alkali Resistance, General Chemical Resistance, Oil Resistance

Special Characteristics
U.V. stabilized or stable to weather, Heat stabilized or stable to heat, Transparent

Features
Acoustical Barrier Properties

Applications
Automotive

Regional Availability
North America, Europe, Asia Pacific