

**SUMIPEX® MG5**

PMMA

Sumitomo Chemical Co., Ltd.

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt flow index, MFI	5	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
<b>ISO Data</b>			
Stress at break	75	MPa	ISO 527
Strain at break	3	%	ISO 527
Flexural modulus, 23°C	3100	MPa	ISO 178
Charpy notched impact strength, +23°C	1.4	kJ/m <sup>2</sup>	ISO 179/1eA
Rockwell hardness	M 95	-	ISO 2039-2

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	99 <sup>[ann.]</sup>	°C	ISO 75-1/-2
Vicat softening temperature, B	106	°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
<b>ISO Data</b>			
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
<b>ISO Data</b>			
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/m <sup>3</sup>	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

## SUMIPEX® MG5

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### Special Characteristics

U.V. stabilized or stable to weather, Transparent

### Features

Light Guiding

### Applications

IT / Business Machine, Electrical and Electronical

### Regional Availability

North America, Europe, Asia Pacific