

## Mitsubishi Xantar<sup>®</sup> MX 1002 Polycarbonate

Category : Polymer , Thermoplastic , Polycarbonate (PC) , Polycarbonate, Molded

### Material Notes:

Xantar<sup>®</sup> materials are engineered for performance, consistency and reliability. This makes Xantar<sup>®</sup> resins ideal for interior automotive components, electrical equipment and consumer appliances where quality is a key requirement. The Xantar<sup>®</sup> range includes: clear and tinted grades for transparent applications reinforced materials Flame retardant and halogen free types lubricated materials for added wear resistance Mitsubishi Engineering Plastics acquired the Xantar<sup>®</sup> product line from DSM in 2010.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Mitsubishi-Xantar-MX-1002-Polycarbonate.php](http://www.lookpolymers.com/polymer_Mitsubishi-Xantar-MX-1002-Polycarbonate.php)

Physical Properties	Metric	English	Comments
Density	1.20 g/cc	0.0434 lb/in <sup>3</sup>	ISO 1183
Water Absorption	0.35 %	0.35 %	Sim. to ISO 62
Linear Mold Shrinkage, Flow	0.0060 cm/cm	0.0060 in/in	ISO 294-4
Melt Flow	25.2 g/10 min @Load 1.20 kg, Temperature 300 °C	25.2 g/10 min @Load 2.65 lb, Temperature 572 °F	Calculated from Volume Flow Rate of 21 cm <sup>3</sup> /10min.; ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell M	70	70	ISO 2039-2
Tensile Strength, Yield	55.0 MPa	7980 psi	ISO 527-1/-2
Elongation at Break	>= 50 %	>= 50 %	ISO 527-1/-2
Elongation at Yield	6.0 %	6.0 %	ISO 527-1/-2
Tensile Modulus	2.20 GPa	319 ksi	ISO 527-1/-2
Flexural Strength	80.0 MPa	11600 psi	ISO 178
Flexural Modulus	2.30 GPa	334 ksi	ISO 178
Izod Impact, Notched (ISO)	50.0 kJ/m <sup>2</sup> @Temperature 23.0 °C	23.8 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	ISO 180/4A

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	65.0 µm/m-°C @Temperature 20.0 °C	36.1 µin/in-°F @Temperature 68.0 °F	ISO 11359-1/-2

Thermal Properties <small>Deflection Temperature at 1.8 MPa (104 psi)</small>	Metric <small>115 Â°C</small>	English <small>230 Â°F</small>	Comments <small>ISO 75-1/-2</small>
Vicat Softening Point	135 Â°C	275 Â°F	50Â°C/h 50N; ISO 306
UL RTI, Electrical	110 Â°C @Thickness 1.50 mm	230 Â°F @Thickness 0.0591 in	UL746B
	110 Â°C @Thickness 3.00 mm	230 Â°F @Thickness 0.118 in	UL746B
UL RTI, Mechanical with Impact	85.0 Â°C @Thickness 1.50 mm	185 Â°F @Thickness 0.0591 in	UL746B
	105 Â°C @Thickness 3.00 mm	221 Â°F @Thickness 0.118 in	UL746B
UL RTI, Mechanical without Impact	105 Â°C @Thickness 1.50 mm	221 Â°F @Thickness 0.0591 in	UL746B
	110 Â°C @Thickness 3.00 mm	230 Â°F @Thickness 0.118 in	UL746B
Flammability, UL94	V-0 @Thickness 1.60 mm	V-0 @Thickness 0.0630 in	IEC 60695-11-10
	V-0 @Thickness 3.00 mm	V-0 @Thickness 0.118 in	IEC 60695-11-10
	5VB @Thickness 2.00 mm	5VB @Thickness 0.0787 in	IEC 60695-11-20
Oxygen Index	33 %	33 %	ISO 4589-1/-2
Glow Wire Test	960 Â°C @Thickness 1.50 mm	1760 Â°F @Thickness 0.0591 in	Glow Wire Flammability Index; IEC 60695-2-12
	960 Â°C @Thickness 3.00 mm	1760 Â°F @Thickness 0.118 in	Glow Wire Flammability Index; IEC 60695-2-12

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+15 ohm-cm	>= 1.00e+15 ohm-cm	IEC 60093
Surface Resistance	>= 1.00e+15 ohm	>= 1.00e+15 ohm	IEC 60093
Dielectric Constant	2.8 @Frequency 1e+6 Hz	2.8 @Frequency 1e+6 Hz	IEC 60250

Electrical Properties	Metric	English	Comments
	@Frequency 100 Hz	@Frequency 100 Hz	IEC 60250
Dielectric Strength	29.0 kV/mm	737 kV/in	IEC 60243-1
Dissipation Factor	0.00066	0.00066	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
	0.0092	0.0092	IEC 60250
	@Frequency 1e+6 Hz	@Frequency 1e+6 Hz	
Comparative Tracking Index	250 - 399 V	250 - 399 V	PLC 2; UL 746A

Descriptive Properties	Value	Comments
Flame Retardant	Yes	
Flame Retarding Agent	Yes	
Heat stabilized or stable to heat	Yes	
High impact or impact modified	Yes	
Injection molding	Yes	
Other Extrusion	Yes	
Platable	Yes	
Release Agent	Yes	
Thermoforming	Yes	
Without Fillers	Yes	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China