

XANTAR™ CM 506

Mitsubishi Engineering-Plastics Corp - Polycarbonate + ABS

General Information			
Product Description			
PC/ABS, Vicat 130°C			
General			
RoHS Compliance • RoHS Compliant			
ASTM & ISO Properties ¹			
Physical	Nominal Value	Unit	Test Method
Density	1.14	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	18	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	17	cm ³ /10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow	0.50 to 0.70	%	
Flow	0.50 to 0.70	%	
Water Absorption (Saturation, 23°C)	0.50	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2300	MPa	ISO 527-1/1
Tensile Stress (Yield)	55.0	MPa	ISO 527-2/50
Tensile Strain			ISO 527-2/50
Yield	5.0	%	
Break	> 50	%	
Flexural Modulus ²	2300	MPa	ISO 178
Flexural Stress ²	85.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179
-30°C	20	kJ/m ²	
23°C	40	kJ/m ²	
Charpy Unnotched Impact Strength			ISO 179
-30°C	No Break		
23°C	No Break		
Notched Izod Impact Strength			ISO 180/4A
-40°C	35	kJ/m ²	
-20°C	60	kJ/m ²	
23°C	70	kJ/m ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/A
1.8 MPa, Unannealed	110	°C	
Vicat Softening Temperature	130	°C	ISO 306
CLTE			ISO 11359-2
Flow	7.0E-5	cm/cm/°C	
Transverse	7.0E-5	cm/cm/°C	



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Thermal	Nominal Value	Unit	Test Method
Effective Thermal Diffusivity	1.00E-7	m²/s	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	IEC 60093
Volume Resistivity	> 1.0E+15	ohms·cm	IEC 60093
Dielectric Constant (1 MHz)	2.90		IEC 60250
Comparative Tracking Index (CTI)	PLC 2		UL 746A
Comparative Tracking Index	275	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
1.5 mm	HB		
3.0 mm	HB		
Glow Wire Flammability Index			IEC 60695-2-12
1.5 mm	725	°C	
3.0 mm	700	°C	
Glow Wire Ignition Temperature			IEC 60695-2-13
1.5 mm	750	°C	
3.0 mm	725	°C	
Oxygen Index	23	%	ISO 4589-2
Fill Analysis	Nominal Value	Unit	
Melt Density	1.03	g/cm³	
Melt Thermal Conductivity	0.23	W/m/K	
Specific Heat Capacity of Melt	2280	J/kg/°C	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	110	°C
Drying Time - Hot Air Dryer	4.0	hr
Rear Temperature	260 to 290	°C
Middle Temperature	260 to 290	°C
Front Temperature	260 to 290	°C
Nozzle Temperature	260 to 290	°C
Mold Temperature	50 to 80	°C
Ejection Temperature	120	°C

