

XANTAR™ CF 407

Mitsubishi Engineering-Plastics Corp - Polycarbonate + ABS

General Information

Product Description

PC/ABS, Flame retardant (Phosphate), High Heat Resistant

General

Additive	• Flame Retardant	
Features	• Flame Retardant	• High Heat Resistance
RoHS Compliance	• RoHS Compliant	

ASTM & ISO Properties¹

Physical	Nominal Value	Unit	Test Method
Density	1.19	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (260°C/5.0 kg)	24	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (260°C/5.0 kg)	23	cm ³ /10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow	0.40 to 0.60	%	
Flow	0.40 to 0.60	%	
Water Absorption (Saturation, 23°C)	0.60	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2700	MPa	ISO 527-1/1
Tensile Stress (Yield)	60.0	MPa	ISO 527-2/50
Tensile Strain			ISO 527-2/50
Yield	4.0	%	
Break	> 50	%	
Flexural Modulus ²	2700	MPa	ISO 178
Flexural Stress ²	95.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Unnotched Impact Strength			ISO 179
-30°C	No Break		
23°C	No Break		
Notched Izod Impact Strength (23°C)	50	kJ/m ²	ISO 180/4A
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ISO 75-2/A
1.8 MPa, Unannealed	100	°C	
Vicat Softening Temperature	120	°C	ISO 306
RTI Elec			UL 746B
1.5 mm	95.0	°C	
3.0 mm	95.0	°C	
RTI Imp			UL 746B
1.5 mm	90.0	°C	
3.0 mm	95.0	°C	



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Thermal	Nominal Value	Unit	Test Method
RTI Str			UL 746B
1.5 mm	90.0	°C	
3.0 mm	95.0	°C	
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)	3.00		IEC 60250
Comparative Tracking Index	600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating			UL 94
1.5 mm		V-0	
3.0 mm	•	V-0	
	•	5VB	
Glow Wire Flammability Index			IEC 60695-2-12
1.5 mm	960	°C	
3.0 mm	960	°C	
Glow Wire Ignition Temperature			IEC 60695-2-13
1.5 mm	750	°C	
3.0 mm	725	°C	
Oxygen Index	32	%	ISO 4589-2
Fill Analysis	Nominal Value	Unit	
Melt Density	1.01	g/cm³	
Melt Thermal Conductivity	0.23	W/m/K	
Specific Heat Capacity of Melt	2220	J/kg/°C	

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Hot Air Dryer	100	°C
Drying Time - Hot Air Dryer	4.0	hr
Rear Temperature	260 to 280	°C
Middle Temperature	260 to 280	°C
Front Temperature	260 to 280	°C
Nozzle Temperature	260 to 280	°C
Mold Temperature	50 to 80	°C
Ejection Temperature	105	°C

