

Iuplace™ TX403

Mitsubishi Engineering-Plastics Corp - Polyphenylene Ether + PS

General Information			
Product Description			
Warpage, low; Impact resistance, good			
General			
Features	• Good Impact Resistance	• Low Warpage	
Uses	• Automotive Applications • Automotive Electronics	• Electrical/Electronic Applications • General Purpose	
ASTM & ISO Properties ¹			
Physical	Nominal Value	Unit	Test Method
Density	1.09	g/cm³	ISO 1183
Melt Volume-Flow Rate (MVR) (280°C/5.0 kg)	16	cm³/10min	ISO 1133
Molding Shrinkage			Internal Method
Across Flow : 3.20 mm	0.50 to 0.70	%	
Flow : 3.20 mm	0.50 to 0.70	%	
Water Absorption (Saturation, 23°C)	0.060	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	2600	MPa	ISO 527-1/1
Tensile Stress (Yield)	51.0	MPa	ISO 527-2/50
Tensile Strain			ISO 527-2/50
Yield	2.6	%	
Break	24	%	
Flexural Modulus ²	2500	MPa	ISO 178
Flexural Stress ²	80.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	20	kJ/m²	ISO 179
Charpy Unnotched Impact Strength (23°C)	No Break		ISO 179
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed	100	°C	ISO 75-2/B
1.8 MPa, Unannealed	95.0	°C	ISO 75-2/A
CLTE			ISO 11359-2
Flow	6.0E-5	cm/cm/°C	
Transverse	6.0E-5	cm/cm/°C	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	2.0E+15	ohms	IEC 60093
Volume Resistivity	3.0E+16	ohms·cm	IEC 60093
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.75 mm)	HB		UL 94



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Processing Information		
Injection	Nominal Value	Unit
Rear Temperature	250 to 280	°C
Middle Temperature	270 to 300	°C
Front Temperature	270 to 300	°C
Nozzle Temperature	270 to 300	°C
Mold Temperature	80 to 110	°C
Injection Pressure	20.0 to 150	MPa
Injection Rate	Moderate	
Screw Speed	60 to 150	rpm

