Polybutylene Terephthalate

Mitsubishi Engineering-Plastics Corp

Product Description	

GE-reinforced / Elame Retardant (Bromine Free), Tracking resistant, GF	15%	
General	biomine rice), ridoking resistant, er	1070	
Material Status	Commercial: Active		
UL Yellow Card ¹	 E53664-100108308 		
Search for UL Yellow Card	 Mitsubishi Engineering-Plas NOVADURAN™ 	stics Corp	
Availability	Africa & Middle EastAsia Pacific	EuropeLatin America	North America
Filler / Reinforcement	 Glass Fiber, 15% Filler by V 	Veight	
Features	Bromine Free	 Flame Retardant 	 Tracking Resistant
Uses	Automotive ApplicationsAutomotive Electronics	 Electrical/Electronic Applications General Purpose 	

Tensile Modulus5300 MPaISO 527-2/1Tensile Stress (Break)75.0 MPaISO 527-2/5Tensile Strain (Break)2.5 %ISO 527-2/5Flexural Modulus ³ 5300 MPaISO 178Flexural Stress ³ 110 MPaISO 178ImpactNominal Value UnitTest MethodCharpy Notched Impact Strength (23°C)9.0 kJ/m²ISO 179Charpy Unnotched Impact Strength (23°C)37 kJ/m²ISO 179	Physical	Nominal Value Unit	Test Method
Molding ShrinkageInternal MethodAcross Flow : 2.00 mm1.2 %Flow : 2.00 mm0.50 %Water Absorption (Saturation, 23°C)0.070 %ISO 62MechanicalNominal Value UnitTensile Modulus5300 MPa1SO 527-2/1Tensile Strain (Break)75.0 MPaElexural Modulus ³ 5300 MPaFlexural Modulus ³ 5300 MPaSo 527-2/5Flexural Modulus ³ 5300 MPaSo 527-2/5Tensile Strain (Break)2.5 %Iso 527-2/5Flexural Modulus ³ 5300 MPaSo 178ImpactNominal Value UnitCharpy Notched Impact Strength (23°C)9.0 kJ/m²Charpy Unotched Impact Strength (23°C)9.0 kJ/m²O 45 MPa, Annealed208 °CHeat Deflection Temperature220 °C0.45 MPa, Annealed208 °C1.8 MPa, Annealed208 °C1.8 MPa, Annealed208 °CSo 11357-3CLTEIso 11357-3CLTEIso 11357-3Flow :-30 to 35°C3.4E-5 cm/cm/°CFlow :-30 to 35°C9.3E-5 cm/cm/°CFlow :-30 to 120°C2.6E-5 cm/cm/°CTransverse : -30 to 120°C1.5E-4 cm/cm/°C </td <td>Density</td> <td>1.44 g/cm³</td> <td>ISO 1183</td>	Density	1.44 g/cm ³	ISO 1183
Across Flow : 2.00 mm 1.2 % Flow : 2.00 mm 0.50 % Wate Absorption (Saturation, 23°C) 0.070 % ISO 62 Mechanical Nominal Value Unit Test Method Tensile Modulus 5300 MPa ISO 527-2/5 Tensile Stress (Break) 75.0 MPa ISO 527-2/5 Tensile Stress (Break) 2.5 % ISO 527-2/5 Tensile Stress (Break) 2.5 % ISO 527-2/5 Flexural Modulus ³ 5300 MPa ISO 178 Flexural Modulus ³ 5300 MPa ISO 178 Flexural Stress ³ 110 MPa ISO 178 Impact Nominal Value Unit Test Method Charpy Notched Impact Strength (23°C) 9.0 kJ/m² ISO 179 Charpy Unnotched Impact Strength (23°C) 37 kJ/m² ISO 179 Thermal Nominal Value Unit Test Method Heat Deflection Temperature 220 °C ISO 75-2/B 0.45 MPa, Annealed 208 °C ISO 1357-3 CLTE ISO 1359-2 ISO 1359-2 Flow : -30 to 120°C 2.6E-5 cm/cm/°C ISO 1359-2 Flow : -30 to 120°C 2.6E-5 cm/cm/°C <td< td=""><td>Melt Volume-Flow Rate (MVR) (250°C/5.0 kg)</td><td>27.0 cm³/10min</td><td>ISO 1133</td></td<>	Melt Volume-Flow Rate (MVR) (250°C/5.0 kg)	27.0 cm ³ /10min	ISO 1133
Flow: 0.50 % Water Absorption (Saturation, 23°C) 0.070 % ISO 62 Mechanical Nominal Value Unit Test Method Tensile Modulus 5300 MPa ISO 527-2/5 Tensile Stress (Break) 75.0 MPa ISO 527-2/5 Tensile Strain (Break) 2.5 % ISO 527-2/5 Flexural Modulus ³ 5300 MPa ISO 178 Flexural Stress ³ 110 MPa ISO 178 Impact Nominal Value Unit Test Method Charpy Notched Impact Strength (23°C) 9.0 kJ/m² ISO 179 Charpy Notched Impact Strength (23°C) 37 kJ/m² ISO 179 Charpy Notched Impact Strength (23°C) 37 kJ/m² ISO 179 Charpy Notched Impact Strength (23°C) 37 kJ/m² ISO 179 Charpy Notched Impact Strength (23°C) 37 kJ/m² ISO 179 Charpy Notched Impact Strength (23°C) 37 kJ/m² ISO 179 Charpy Notched Impact Strength (23°C) 37 kJ/m² ISO 179 Charpy Notched Impact Strength (23°C) 13 kJ/m² ISO 179 Cheary Annealed 208 °C ISO 75-2/B </td <td>Molding Shrinkage</td> <td></td> <td>Internal Method</td>	Molding Shrinkage		Internal Method
Water Absorption (Saturation, 23°C) 0.070 % ISO 62 Mechanical Nominal Value Unit Test Method Tensile Modulus 5300 MPa ISO 527-2/1 Tensile Stress (Break) 75.0 MPa ISO 527-2/5 Tensile Stress (Break) 2.5 % ISO 527-2/5 Tensile Stress (Break) 2.5 % ISO 527-2/5 Tensile Stress (Break) 2.5 % ISO 527-2/5 Flexural Modulus ³ 5300 MPa ISO 178 Flexural Modulus ³ 5300 MPa ISO 178 Flexural Stress ³ 110 MPa ISO 178 Impact Nominal Value Unit Test Method Charpy Notched Impact Strength (23°C) 9.0 kJ/m² ISO 179 Thermal Nominal Value Unit Test Method Heat Deflection Temperature 220 °C ISO 75-2/B 1.8 MPa, Annealed 208 °C ISO 1357-3 CLTE ISO 1357-3 ISO 11357-3 CLTE ISO 1359-2 Flow : -30 to 120°C 2.9E-5 cm/cm/°C Flow : -30 to 120°C 2.9E-5 cm/cm/°C Flow : -30 to 120°C 1.2E-	Across Flow : 2.00 mm	1.2 %	
MechanicalNominal Value UnitTest MethodTensile Modulus5300 MPaISO 527-2/1Tensile Stress (Break)75.0 MPaISO 527-2/5Tensile Strain (Break)2.5 %ISO 527-2/5Flexural Modulus ³ 5300 MPaISO 527-2/5Flexural Modulus ³ 5300 MPaISO 178Flexural Stress ³ 110 MPaISO 178ImpactNominal Value UnitTest MethodCharpy Notched Impact Strength (23°C)9.0 kJ/m²ISO 179Charpy Unnotched Impact Strength (23°C)9.0 kJ/m²ISO 179Charpy Unnotched Impact Strength (23°C)9.0 kJ/m²ISO 179ThermalNominal Value UnitTest MethodHeat Deflection Temperature200 °CISO 75-2/B1.8 MPa, Annealed208 °CISO 75-2/AMetting Temperature224 °CISO 11357-3CLTEISO 135°C3.4E-5 cm/cm/°CFlow : -30 to 120°C2.9E-5 cm/cm/°CTransverse : -30 to 35°C9.3E-5 cm/cm/°CTransverse : -30 to 35°C9.3E-5 cm/cm/°CTransverse : -30 to 32°C1.2E-4 cm/cm/°CTransverse : -30 to 35°C9.3E-5 cm/cm/°CTransverse : -30 to 35°C1.2E-4 cm/cm/°CTransverse : -30 to 20°C1.5E-4 cm/cm/°CTransverse : -30 to 20°C1	Flow : 2.00 mm	0.50 %	
Tensile Modulus 5300 MPa ISO 527-2/1 Tensile Stress (Break) 75.0 MPa ISO 527-2/5 Tensile Strain (Break) 2.5 % ISO 527-2/5 Flexural Modulus ³ 5300 MPa ISO 178 Flexural Stress ³ 110 MPa ISO 178 Impact Nominal Value Unit Test Method Charpy Notched Impact Strength (23°C) 9.0 kJ/m² ISO 179 Charpy Unnotched Impact Strength (23°C) 37 kJ/m² ISO 179 Thermal Nominal Value Unit Test Method Heat Deflection Temperature 0.45 MPa, Annealed > 220 °C ISO 179-2/B 1.8 MPa, Annealed 208 °C ISO 75-2/B ISO 11357-3 CLTE ISO 11357-3 ISO 11357-3 ISO 11359-2 Flow : -30 to 35°C 3.4E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 120°C 2.6E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 120°C 2.6E-5 cm/cm/°C ISO 11359-2 Transverse : -30 to 35°C 9.3E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 120°C 1.2E-4 cm/cm/°C Transverse : -30 to 120°C	Water Absorption (Saturation, 23°C)	0.070 %	ISO 62
Tensile Stress (Break) 75.0 MPa ISO 527-2/5 Tensile Strain (Break) 2.5 % ISO 527-2/5 Flexural Modulus ³ 5300 MPa ISO 178 Flexural Stress ³ 110 MPa ISO 178 Impact Nominal Value Unit Test Method Charpy Notched Impact Strength (23°C) 9.0 kJ/m² ISO 179 Charpy Unnotched Impact Strength (23°C) 9.0 kJ/m² ISO 179 Thermal Nominal Value Unit Test Method Heat Deflection Temperature 0.45 MPa, Annealed S20 °C ISO 75-2/B 1.8 MPa, Annealed 208 °C ISO 75-2/A ISO 11357-3 CLTE ISO 120°C ISO 135°C 3.4E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 35°C 3.4E-5 cm/cm/°C ISO 11359-2 ISO 11359-2 Flow : -30 to 120°C 2.6E-5 cm/cm/°C ISO 11359-2 ISO 11359-2 Flow : -30 to 120°C 2.6E-5 cm/cm/°C ISO 11359-2 ISO 11359-2 Flow : -30 to 120°C 1.2E-4 cm/cm/°C ITansverse : -30 to 35°C 9.3E-5 cm/cm/°C Transverse : -30 to 120°C 1.2E-4 cm/cm/°C	Mechanical	Nominal Value Unit	Test Method
Tensile Strain (Break) 2.5% ISO 527-2/5 Flexural Modulus ³ 5300 MPa ISO 178 Flexural Stress ³ 110 MPa ISO 178 Impact Nominal Value Unit Test Method Charpy Notched Impact Strength (23°C) 9.0 kJ/m² ISO 179 Charpy Unnotched Impact Strength (23°C) 9.0 kJ/m² ISO 179 Charpy Unnotched Impact Strength (23°C) 37 kJ/m² ISO 179 Thermal Nominal Value Unit Test Method Heat Deflection Temperature 0.45 MPa, Annealed 220 °C ISO 75-2/B 1.8 MPa, Annealed 208 °C ISO 11357-3 ISO 11357-3 CLTE ISO 11359-2 Flow : -30 to 35°C 3.4E-5 cm/cm/°C Flow : -30 to 120°C ISO 11359-2 Flow : -30 to 120°C 2.6E-5 cm/cm/°C ISO 11359-2 ISO 11359-2 ISO 11359-2 Flow : -30 to 120°C 3.8E-5 cm/cm/°C ISO 11359-2 ISO 11359-2 Flow : -30 to 120°C 1.2E-4 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.5E-4 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C	Tensile Modulus	5300 MPa	ISO 527-2/1
Flexural Modulus ³ 5300 MPa ISO 178 Flexural Stress ³ 110 MPa ISO 178 Impact Nominal Value Unit Test Method Charpy Notched Impact Strength (23°C) 9.0 kJ/m ² ISO 179 Charpy Unnotched Impact Strength (23°C) 37 kJ/m ² ISO 179 Thermal Nominal Value Unit Test Method Heat Deflection Temperature 0.45 MPa, Annealed > 220 °C ISO 75-2/B 1.8 MPa, Annealed 208 °C ISO 11357-3 CLTE ISO 11357-3 ISO 11359-2 Flow : -30 to 35°C 3.4E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 120°C 2.9E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 120°C 2.9E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 120°C 2.9E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 120°C 2.9E-5 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 11357-3 TIELEC (0.75 m	Tensile Stress (Break)	75.0 MPa	ISO 527-2/5
Flexural Stress ³ 110 MPa ISO 178 Impact Nominal Value Unit Test Method Charpy Notched Impact Strength (23°C) 9.0 kJ/m² ISO 179 Charpy Unnotched Impact Strength (23°C) 37 kJ/m² ISO 179 Charpy Unnotched Impact Strength (23°C) 37 kJ/m² ISO 179 Thermal Nominal Value Unit Test Method Heat Deflection Temperature 200 °C ISO 75-2/B 0.45 MPa, Annealed 208 °C ISO 75-2/B 1.8 MPa, Annealed 208 °C ISO 11357-3 CLTE ISO 11357-3 ISO 11359-2 Flow : -30 to 35°C 3.4E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 120°C 2.6E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 120°C 2.6E-5 cm/cm/°C ISO 11359-2 Transverse : -30 to 35°C 9.3E-5 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 11357-3 Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1	Tensile Strain (Break)	2.5 %	ISO 527-2/5
Impact Nominal Value Unit Test Method Charpy Notched Impact Strength (23°C) 9.0 kJ/m² ISO 179 Charpy Unnotched Impact Strength (23°C) 37 kJ/m² ISO 179 Thermal Nominal Value Unit Test Method Heat Deflection Temperature 200°C ISO 75-2/B 0.45 MPa, Annealed 220°C ISO 179 1.8 MPa, Annealed 208°C ISO 75-2/B 1.8 MPa, Annealed 208°C ISO 11357-3 CLTE ISO 11357-3 ISO 11359-2 Flow : -30 to 35°C 3.4E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 120°C 2.9E-5 cm/cm/°C Flow : 35 to 120°C Transverse : -30 to 35°C 9.3E-5 cm/cm/°C Transverse : -30 to 35°C Transverse : -30 to 120°C 1.2E-4 cm/cm/°C Transverse : -30 to 120°C Transverse : -30 to 120°C 1.5E-4 cm/cm/°C Transverse : 35 to 120°C Transverse : 35 to 120°C 1.5E-4 cm/cm/°C Transverse : 35 to 120°C RTI Elec (0.75 mm) 75.0 °C UL 746	Flexural Modulus ³	5300 MPa	ISO 178
Charpy Notched Impact Strength (23°C) 9.0 kJ/m² ISO 179 Charpy Unnotched Impact Strength (23°C) 37 kJ/m² ISO 179 Thermal Nominal Value Unit Test Method Heat Deflection Temperature 200 °C ISO 75-2/B 0.45 MPa, Annealed 208 °C ISO 179 1.8 MPa, Annealed 208 °C ISO 75-2/A Melting Temperature 224 °C ISO 11357-3 CLTE ISO 11359-2 ISO 11359-2 Flow : -30 to 35°C 3.4E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 120°C 2.9E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 120°C 2.6E-5 cm/cm/°C ISO 11359-2 Transverse : -30 to 35°C 9.3E-5 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.5E-4 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.5E-4 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.5E-4 cm/cm/°C ISO 11359-2 RTI Elec (0.75 mm)	Flexural Stress ³	110 MPa	ISO 178
Charpy Unnotched Impact Strength (23°C) 37 kJ/m2 ISO 179 Thermal Nominal Value Unit Test Method Heat Deflection Temperature 220 °C ISO 75-2/B 0.45 MPa, Annealed 208 °C ISO 75-2/A 1.8 MPa, Annealed 208 °C ISO 11357-3 CLTE ISO 11357-3 ISO 11359-2 Flow : -30 to 35°C 3.4E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 120°C 2.9E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 120°C 2.6E-5 cm/cm/°C ISO 11359-2 Transverse : -30 to 35°C 9.3E-5 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 1120°C Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 1120°C Transverse : -30 to 120°C 1.5E-4 cm/cm/°C ISO 1120°C RTI Elec (0.75 mm) 75.0 °C UL 746 RTI Imp (0.75 mm) 75.0 °C UL 746	Impact	Nominal Value Unit	Test Method
ThermalNominal Value UnitTest MethodHeat Deflection Temperature> 220 °CISO 75-2/B0.45 MPa, Annealed> 208 °CISO 75-2/A1.8 MPa, Annealed208 °CISO 75-2/AMelting Temperature224 °CISO 11357-3CLTEISO 11359-2Flow : -30 to 35°C3.4E-5 cm/cm/°CFlow : -30 to 120°C2.9E-5 cm/cm/°CFlow : 35 to 120°C2.6E-5 cm/cm/°CTransverse : -30 to 35°C9.3E-5 cm/cm/°CTransverse : -30 to 120°C1.2E-4 cm/cm/°CTransverse : -30 to 120°C1.5E-4 cm/cm/°CRTI Elec (0.75 mm)75.0 °CUL 746RTI Imp (0.75 mm)75.0 °CUL 746	Charpy Notched Impact Strength (23°C)	9.0 kJ/m²	ISO 179
Heat Deflection Temperature > 220 °C ISO 75-2/B 0.45 MPa, Annealed 208 °C ISO 75-2/A 1.8 MPa, Annealed 208 °C ISO 75-2/A Melting Temperature 224 °C ISO 11357-3 CLTE ISO 11359-2 ISO 11359-2 Flow : -30 to 35°C 3.4E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 120°C 2.9E-5 cm/cm/°C ISO 11359-2 Flow : 35 to 120°C 2.6E-5 cm/cm/°C ISO 11359-2 Transverse : -30 to 35°C 9.3E-5 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 1120°C Transverse : -30 to 120°C 1.5E-4 cm/cm/°C ISO 1120°C Transverse : -30 to 120°C 1.5E-4 cm/cm/°C ISO 1120°C RTI Elec (0.75 mm) 75.0 °C UL 746 RTI Imp (0.75 mm) 75.0 °C UL 746	Charpy Unnotched Impact Strength (23°C)	37 kJ/m²	ISO 179
0.45 MPa, Annealed > 220 °C ISO 75-2/B 1.8 MPa, Annealed 208 °C ISO 75-2/A Melting Temperature 224 °C ISO 11357-3 CLTE ISO 11359-2 ISO 11359-2 Flow : -30 to 35°C 3.4E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 120°C 2.9E-5 cm/cm/°C ISO 11357-3 Flow : -30 to 120°C 2.9E-5 cm/cm/°C ISO 11359-2 Flow : -30 to 120°C 2.9E-5 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 2.9E-5 cm/cm/°C ISO 11359-2 Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 120°C Transverse : -30 to 120°C 1.2E-4 cm/cm/°C ISO 120°C Transverse : -30 to 120°C 1.5E-4 cm/cm/°C ISO 1120°C Transverse : -30 to 120°C 1.5E-4 cm/cm/°C ISO 1120°C Transverse : -30 to 120°C 1.5E-4 cm/cm/°C ISO 120°C Transverse : -30 to 120°C 1.5E-4 cm/cm/°C ISO 120°C RTI Elec (0.75 mm) 75.0 °C UL 746 RTI Imp (0.75 mm) 75.0 °C UL 746	Thermal	Nominal Value Unit	Test Method
1.8 MPa, Annealed 208 °C ISO 75-2/A Melting Temperature 224 °C ISO 11357-3 CLTE ISO 11359-2 Flow : -30 to 35°C 3.4E-5 cm/cm/°C Flow : -30 to 120°C 2.9E-5 cm/cm/°C Flow : 35 to 120°C 2.6E-5 cm/cm/°C Transverse : -30 to 35°C 9.3E-5 cm/cm/°C Transverse : -30 to 120°C 1.2E-4 cm/cm/°C Transverse : -30 to 120°C 1.5E-4 cm/cm/°C Transverse : 35 to 120°C 1.5E-4 cm/cm/°C RTI Elec (0.75 mm) 75.0 °C UL 746 RTI Imp (0.75 mm) 75.0 °C UL 746	Heat Deflection Temperature		
Melting Temperature 224 °C ISO 11357-3 CLTE ISO 11359-2 Flow : -30 to 35°C 3.4E-5 cm/cm/°C Flow : -30 to 120°C 2.9E-5 cm/cm/°C Flow : 35 to 120°C 2.6E-5 cm/cm/°C Transverse : -30 to 35°C 9.3E-5 cm/cm/°C Transverse : -30 to 35°C 9.3E-5 cm/cm/°C Transverse : -30 to 120°C 1.2E-4 cm/cm/°C Transverse : -30 to 120°C 1.5E-4 cm/cm/°C Transverse : 35 to 120°C 0.12F-4 cm/cm/°C Transverse : 35 to 120°C 1.5E-4 cm/cm/°C Transverse : 35 to 120°C 0.12746 RTI Elec (0.75 mm) 75.0 °C UL 746 RTI Imp (0.75 mm) 75.0 °C UL 746	0.45 MPa, Annealed	> 220 °C	ISO 75-2/B
CLTE ISO 11359-2 Flow : -30 to 35°C 3.4E-5 cm/cm/°C Flow : -30 to 120°C 2.9E-5 cm/cm/°C Flow : 35 to 120°C 2.6E-5 cm/cm/°C Transverse : -30 to 35°C 9.3E-5 cm/cm/°C Transverse : -30 to 120°C 1.2E-4 cm/cm/°C Transverse : -30 to 120°C 1.5E-4 cm/cm/°C Transverse : 35 to 120°C 0.12E-4 cm/cm/°C Transverse : 35 to 120°C 1.5E-4 cm/cm/°C RTI Elec (0.75 mm) 75.0 °C UL 746 RTI Imp (0.75 mm) 75.0 °C UL 746	1.8 MPa, Annealed	208 °C	ISO 75-2/A
Flow : -30 to 35°C 3.4E-5 cm/cm/°C Flow : -30 to 120°C 2.9E-5 cm/cm/°C Flow : 35 to 120°C 2.6E-5 cm/cm/°C Transverse : -30 to 35°C 9.3E-5 cm/cm/°C Transverse : -30 to 120°C 1.2E-4 cm/cm/°C Transverse : -30 to 120°C 1.5E-4 cm/cm/°C Transverse : 35 to 120°C 1.5E-4 cm/cm/°C RTI Elec (0.75 mm) 75.0 °C UL 746 RTI Imp (0.75 mm) 75.0 °C UL 746	Melting Temperature	224 °C	ISO 11357-3
Flow : -30 to 120°C 2.9E-5 cm/cm/°C Flow : 35 to 120°C 2.6E-5 cm/cm/°C Transverse : -30 to 35°C 9.3E-5 cm/cm/°C Transverse : -30 to 120°C 1.2E-4 cm/cm/°C Transverse : 35 to 120°C 1.5E-4 cm/cm/°C Transverse : 35 to 120°C 1.5E-4 cm/cm/°C RTI Elec (0.75 mm) 75.0 °C UL 746 RTI Imp (0.75 mm) 75.0 °C UL 746	CLTE		ISO 11359-2
Flow : 35 to 120°C 2.6E-5 cm/cm/°C Transverse : -30 to 35°C 9.3E-5 cm/cm/°C Transverse : -30 to 120°C 1.2E-4 cm/cm/°C Transverse : 35 to 120°C 1.5E-4 cm/cm/°C RTI Elec (0.75 mm) 75.0 °C UL 746 RTI Imp (0.75 mm) 75.0 °C UL 746	Flow : -30 to 35°C	3.4E-5 cm/cm/°C	
Transverse : -30 to 35°C 9.3E-5 cm/cm/°C Transverse : -30 to 120°C 1.2E-4 cm/cm/°C Transverse : 35 to 120°C 1.5E-4 cm/cm/°C RTI Elec (0.75 mm) 75.0 °C UL 746 RTI Imp (0.75 mm) 75.0 °C UL 746	Flow : -30 to 120°C	2.9E-5 cm/cm/°C	
Transverse : -30 to 120°C 1.2E-4 cm/cm/°C Transverse : 35 to 120°C 1.5E-4 cm/cm/°C RTI Elec (0.75 mm) 75.0 °C UL 746 RTI Imp (0.75 mm) 75.0 °C UL 746	Flow : 35 to 120°C	2.6E-5 cm/cm/°C	
Transverse : 35 to 120°C 1.5E-4 cm/cm/°C RTI Elec (0.75 mm) 75.0 °C UL 746 RTI Imp (0.75 mm) 75.0 °C UL 746	Transverse : -30 to 35°C	9.3E-5 cm/cm/°C	
RTI Elec (0.75 mm) 75.0 °C UL 746 RTI Imp (0.75 mm) 75.0 °C UL 746	Transverse : -30 to 120°C	1.2E-4 cm/cm/°C	
RTI Imp (0.75 mm) 75.0 °C UL 746	Transverse : 35 to 120°C	1.5E-4 cm/cm/°C	
	RTI Elec (0.75 mm)	75.0 °C	UL 746
RTI Str (0.75 mm) 75.0 °C UL 746	RTI Imp (0.75 mm)	75.0 °C	UL 746
	RTI Str (0.75 mm)	75.0 °C	UL 746

1 of 3

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NOVADURAN[™] SEF-515T

Polybutylene Terephthalate Mitsubishi Engineering-Plastics Corp

PROSPECTOR®

Electrical	Nominal Value Unit	Test Method
Surface Resistivity	2.0E+16 ohms	IEC 60093
Volume Resistivity	4.0E+15 ohms · cm	IEC 60093
Electric Strength (2.00 mm)	26 kV/mm	IEC 60243-1
Dielectric Constant (1 MHz)	3.80	IEC 60250
Dissipation Factor (1 MHz)	0.020	IEC 60250
Comparative Tracking Index (CTI)	PLC 0	UL 746
Flammability	Nominal Value Unit	Test Method
Flame Rating (0.75 mm)	V-0	UL 94

Injection	Nominal Value Unit	
Drying Temperature - Hot Air Dryer	120 °C	
Drying Time - Hot Air Dryer	5.0 to 8.0 hr	
Rear Temperature	235 °C	
Middle Temperature	240 °C	
Front Temperature	255 °C	
Nozzle Temperature	250 °C	
Mold Temperature	80 to 100 °C	
Injection Pressure	20.0 to 150 MPa	
Injection Rate	Moderate-Fast	
Screw Speed	80 to 150 rpm	

Notes

¹ A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

² Typical properties: these are not to be construed as specifications.

³ 2.0 mm/min



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NOVADURAN™ SEF-515T

Polybutylene Terephthalate Mitsubishi Engineering-Plastics Corp



Where to Buy

Supplier

Mitsubishi Engineering-Plastics Corp , Japan

Telephone: +81-463-21-8610 Web: http://www.m-ep.co.jp/

Distributor

Chase Plastic Services, Inc. Chase Plastics Services is a North American distributor with representatives throughout the region. Please find your rep here: http:// www.chaseplastics.com/contact/locations Telephone: 800-232-4273 Web: http://www.chaseplastics.com/ Availability: North America

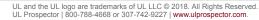
Nexeo Solutions - Europe

Nexeo Solutions is a Pan European distribution company. Contact Nexeo for availability of individual products by country. Telephone: +34-93-480-9125 Web: http://www.nexeosolutions.com/ Availability: Belgium, Bulgaria, Czech Republic, France, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Romania, Russian Federation, Slovakia, Spain, United Kingdom

The Materials Group

Telephone: 616-863-6046 Web: http://thematerialsgroup.com/ Availability: North America





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