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

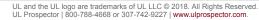
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Nexeo Solutions is a Pan European distribution company. Contact Nexeo for availability of individual products by country. Telephone: +34-93-480-9125 Web: http://www.nexeosolutions.com/ Availability: Belgium, Bulgaria, Czech Republic, France, Ireland, 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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