

Product Texts

Enhanced flow, Specialty filtered Polyetherimide (Tg 225C) with enhanced chemical resistance to strong acids, bases, aromatics and ketones. ECO Conforming.

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|-------------------------------------|-------|------------------------|---------------|
| ISO Data | | | |
| Melt volume-flow rate, MVR | 20 | cm ³ /10min | ISO 1133 |
| Temperature | 360 | °C | - |
| Load | 5 | kg | - |
| ASTM Data | | | |
| Melt Flow Index, MFI | 11 | g/10min | ASTM D 1238 |
| Temperature | 337 | °C | - |
| Load | 6.6 | kg | - |

| Mechanical properties | Value | Unit | Test Standard |
|--|-------|-------------------|---------------|
| ISO Data | | | |
| Tensile Modulus | 2900 | MPa | ISO 527 |
| Yield stress | 100 | MPa | ISO 527 |
| Yield strain | 8 | % | ISO 527 |
| Stress at break | 85 | MPa | ISO 527 |
| Strain at break | 50 | % | ISO 527 |
| Flexural modulus | 2900 | MPa | ISO 178 |
| Charpy impact strength, +23°C | N | kJ/m ² | ISO 179/1eU |
| Charpy impact strength, -30°C | N | kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength, +23°C | 7 | kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength, -30°C | 7 | kJ/m ² | ISO 179/1eA |
| Izod impact strength, +23°C, 4mm | N | kJ/m ² | ISO 180/1U |
| Izod impact strength, -30°C, 4mm | N | kJ/m ² | ISO 180/1U |
| Izod notched impact strength, +23°C, 4mm | 5 | kJ/m ² | ISO 180/1A |
| Izod notched impact strength, -30°C, 4mm | 5 | kJ/m ² | ISO 180/1A |
| ASTM Data | | | |
| Tensile Modulus | 2900 | MPa | ASTM D 638 |
| Tensile Strength at Yield | 100 | MPa | ASTM D 638 |
| Tensile Strength at Break | 75 | MPa | ASTM D 638 |
| Elongation at Yield | 8 | % | ASTM D 638 |
| Elongation at Break | 60 | % | ASTM D 638 |
| Flexural Modulus | 3100 | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | 59 | J/m | ASTM D 256 |
| Izod Impact unnotched, 1/8 in | 2100 | J/m | ASTM D 256 |

| Thermal properties | Value | Unit | Test Standard |
|--|--------|---------|---------------|
| ISO Data | | | |
| Temp. of deflection under load, 1.80 MPa | 198 | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 208 | °C | ISO 75-1/-2 |
| Vicat softening temperature, A | 220 | °C | ISO 306 |
| Vicat softening temperature, B | 215 | °C | ISO 306 |
| Vicat softening temperature, 120°C/h 50N | 215 | °C | ISO 306 |
| ASTM Data | | | |
| DTUL @ 66 psi | 213 | °C | ASTM D 648 |
| DTUL @ 264 psi | 201 | °C | ASTM D 648 |
| Vicat Temperature | 227 | °C | ASTM D 1525 |
| Thermal Conductivity, solid state | 0.0447 | W/(m K) | ASTM C 177 |

| Electrical properties | Value | Unit | Test Standard |
|----------------------------|-------|-------|---------------|
| ISO Data | | | |
| Volume resistivity | >1E13 | Ohm*m | IEC 62631-3-1 |
| Surface resistivity | >1E15 | Ohm | IEC 62631-3-2 |
| Comparative tracking index | 150 | - | IEC 60112 |
| ASTM Data | | | |

ULTEM™ Resin UF5011S - Europe

PEI

Saudi Basic Industries Corporation (SABIC)

| | | | |
|---------------------------------|---------------|-------|------------|
| Dielectric Strength, Short Time | 18 | kV/mm | ASTM D 149 |
| Dissipation Factor, 60 Hz | 0.0021 | - | ASTM D 150 |
| Dielectric Constant, 60 Hz | 3.2 | - | ASTM D 150 |

| Other properties | Value | Unit | Test Standard |
|-------------------------|--------------|-------------------|----------------------|
| Water absorption | 1.2 | % | Sim. to ISO 62 |
| Humidity absorption | 0.2 | % | Sim. to ISO 62 |
| Density | 1280 | kg/m ³ | ISO 1183 |
| Density | 1280 | kg/m ³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|--|------------------|-------------|----------------------|
| Pre-drying - Temperature | 150 | °C | - |
| Pre-drying - Time | 4 - 6 | h | - |
| Processing humidity | ≤0.02 | % | - |
| Melt temperature | 365 - 390 | °C | - |
| Mold temperature | 135 - 165 | °C | - |
| Zone 1 | 345 - 365 | °C | - |
| Zone 2 | 355 - 375 | °C | - |
| Zone 3 | 365 - 390 | °C | - |
| Screw speed | 40 - 70 | rpm | - |
| Back pressure | 0.3 - 0.7 | MPa | - |

Characteristics**Processing**

Injection Molding

Regional Availability

Europe

Chemical Resistance

General Chemical Resistance