

Product Texts

Transparent, standard flow Polyetherimide (Tg 217C). ECO Conforming. US FDA and EU Food Contact compliant.

Processing/Physical Characteristics

| | Value | Unit | Test Standard |
|----------------------------|-------|------------------------|---------------|
| ISO Data | | | |
| Melt volume-flow rate, MVR | 13 | cm ³ /10min | ISO 1133 |
| Temperature | 360 | °C | - |
| Load | 5 | kg | - |
| ASTM Data | | | |
| Melt Flow Index, MFI | 9 | g/10min | ASTM D 1238 |
| Temperature | 337 | °C | - |
| Load | 6.6 | kg | - |

Mechanical properties

| | Value | Unit | Test Standard |
|------------------------------------------|-------|-------------------|---------------|
| ISO Data | | | |
| Tensile Modulus | 3200 | MPa | ISO 527 |
| Yield stress | 105 | MPa | ISO 527 |
| Yield strain | 6 | % | ISO 527 |
| Stress at break | 85 | MPa | ISO 527 |
| Strain at break | 50 | % | ISO 527 |
| Flexural modulus | 3300 | MPa | ISO 178 |
| Charpy notched impact strength, +23°C | 4 | kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength, -30°C | 4 | 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 | 6 | kJ/m ² | ISO 180/1A |
| Izod notched impact strength, -30°C, 4mm | 6 | kJ/m ² | ISO 180/1A |
| Ball indentation hardness | 140 | MPa | ISO 2039-1 |
| ASTM Data | | | |
| Tensile Modulus | 3580 | MPa | ASTM D 638 |
| Tensile Strength at Yield | 110 | MPa | ASTM D 638 |
| Tensile Strength at Break | 90 | MPa | ASTM D 638 |
| Elongation at Yield | 7 | % | ASTM D 638 |
| Elongation at Break | 60 | % | ASTM D 638 |
| Flexural Modulus | 3550 | MPa | ASTM D 790 |
| Izod Impact notched, 1/8 in | 53 | J/m | ASTM D 256 |
| Izod Impact notched, Low-Temperature | 55 | J/m | ASTM D 256 |
| Temperature | -30 | °C | - |
| Izod Impact unnotched, 1/8 in | 1340 | J/m | ASTM D 256 |

Thermal properties

| | Value | Unit | Test Standard |
|------------------------------------------|--------|---------|----------------|
| ISO Data | | | |
| Vicat softening temperature, A | 215 | °C | ISO 306 |
| Vicat softening temperature, B | 211 | °C | ISO 306 |
| Vicat softening temperature, 120°C/h 50N | 212 | °C | ISO 306 |
| Thermal Conductivity | 0.24 | W/(m K) | DIN 52616 |
| Glow Wire Flammability Index (GWFI) | 960 | °C | IEC 60695-2-12 |
| GWFI - thickness tested (3) | 3.2 | mm | - |
| ASTM Data | | | |
| DTUL @ 264 psi | 208 | °C | ASTM D 648 |
| Vicat Temperature | 218 | °C | ASTM D 1525 |
| Thermal Conductivity, solid state | 0.0317 | W/(m K) | ASTM C 177 |

Electrical properties

| | Value | Unit | Test Standard |
|-----------------------------|-------|-------|---------------|
| ISO Data | | | |
| Relative permittivity, 1MHz | 2.9 | - | IEC 62631-2-1 |
| Dissipation factor, 1MHz | 60 | E-4 | IEC 62631-2-1 |
| Volume resistivity | 1E13 | Ohm*m | IEC 62631-3-1 |
| Surface resistivity | >1E15 | Ohm | IEC 62631-3-2 |

ULTEM™ Resin MD130 - Europe

PEI

Saudi Basic Industries Corporation (SABIC)

| | | | |
|----------------------------|------------|-------|-------------|
| Electric strength | 33 | kV/mm | IEC 60243-1 |
| Comparative tracking index | 150 | - | IEC 60112 |

ASTM Data

| | | | |
|---------------------------------|-----------------|--------|------------|
| Dielectric Strength, Short Time | 19.6 | kV/mm | ASTM D 149 |
| Volume Resistivity | >1E15 | Ohm*cm | ASTM D 257 |

| Other properties | Value | Unit | Test Standard |
|-------------------------|--------------|-------------------|----------------------|
| Water absorption | 1.25 | % | Sim. to ISO 62 |
| Humidity absorption | 0.7 | % | Sim. to ISO 62 |
| Density | 1270 | kg/m ³ | ISO 1183 |
| Density | 1270 | 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 | 350 - 400 | °C | - |
| Mold temperature | 135 - 165 | °C | - |
| Zone 1 | 330 - 400 | °C | - |
| Zone 2 | 340 - 400 | °C | - |
| Zone 3 | 345 - 400 | °C | - |
| Screw speed | 40 - 70 | rpm | - |
| Back pressure | 0.3 - 0.7 | MPa | - |

| Processing Recommendation Extrusion | Value | Unit | Test Standard |
|--------------------------------------------|------------------|-------------|----------------------|
| Pre-drying - Temperature | 140 - 150 | °C | - |
| Pre-drying - Time | 4 - 6 | h | - |
| Processing humidity | ≤0.02 | % | - |
| Melt temperature | 320 - 355 | °C | - |
| Mold temperature | 65 - 175 | °C | - |
| Zone 1 | 350 - 325 | °C | - |
| Zone 2 | 330 - 355 | °C | - |
| Zone 3 | 330 - 355 | °C | - |
| Zone 4 | 330 - 355 | °C | - |
| Zone 5 | 330 - 355 | °C | - |

Characteristics**Processing**

Injection Molding, Blow Molding

Special Characteristics

Transparent

Certifications

Food contact, Food approval FDA 21 CFR

Regional Availability

Europe