

Product Texts

Very high flow specialty polycarbonate with outstanding processability and ductility. For medical devices and pharmaceutical applications. Healthcare management of change, biocompatible (ISO10993 or USP Class VI). ETO sterilizable. Contains mold release.

Processing/Physical Characteristics

| | Value | Unit | Test Standard |
|----------------------------|-------|------------------------|---------------|
| ISO Data | | | |
| Melt volume-flow rate, MVR | 33 | cm ³ /10min | ISO 1133 |
| Temperature | 300 | °C | - |
| Load | 1.2 | kg | - |
| ASTM Data | | | |
| Melt Flow Index, MFI | 35 | g/10min | ASTM D 1238 |
| Temperature | 300 | °C | - |
| Load | 1.2 | kg | - |

Mechanical properties

| | Value | Unit | Test Standard |
|--|-------|-------------------|---------------|
| ISO Data | | | |
| Tensile Modulus | 2400 | MPa | ISO 527 |
| Yield stress | 59 | MPa | ISO 527 |
| Yield strain | 5.4 | % | ISO 527 |
| Stress at break | 56 | MPa | ISO 527 |
| Strain at break | 50 | % | ISO 527 |
| Flexural modulus | 2250 | MPa | ISO 178 |
| Charpy impact strength, +23°C, 3mm | N | kJ/m ² | ISO 179/1eU |
| Charpy impact strength, -30°C, 3mm | N | kJ/m ² | ISO 179/1eU |
| Charpy notched impact strength, +23°C | 54 | kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength, -30°C | 12 | kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength, +23°C, 3mm | 60 | kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength, -30°C, 3mm | 30 | kJ/m ² | ISO 179/1eA |
| Izod impact strength, +23°C | N | kJ/m ² | ISO 180/1U |
| Izod notched impact strength, +23°C, 4mm | 45 | kJ/m ² | ISO 180/1A |
| Izod notched impact strength, -30°C, 4mm | 11 | kJ/m ² | ISO 180/1A |
| Izod notched impact strength, +23°C, 3mm | 60 | kJ/m ² | ISO 180/1A |
| Izod notched impact strength, -30°C, 3mm | 30 | kJ/m ² | ISO 180/1A |
| ASTM Data | | | |
| Tensile Modulus | 2360 | MPa | ASTM D 638 |
| Tensile Strength at Yield | 59 | MPa | ASTM D 638 |
| Tensile Strength at Break | 58 | MPa | ASTM D 638 |
| Elongation at Yield | 5.7 | % | ASTM D 638 |
| Elongation at Break | 119 | % | ASTM D 638 |
| Flexural Modulus | 2350 | MPa | ASTM D 790 |
| Rockwell Hardness | L90 | - | ASTM D 785 |
| Izod Impact notched, 1/8 in | 702 | J/m | ASTM D 256 |
| Izod Impact notched, Low-Temperature | 220 | J/m | ASTM D 256 |
| Temperature | -30 | °C | - |

Thermal properties

| | Value | Unit | Test Standard |
|--|-------|------|---------------|
| ISO Data | | | |
| Temp. of deflection under load, 1.80 MPa | 117 | °C | ISO 75-1/-2 |
| Vicat softening temperature, B | 137 | °C | ISO 306 |
| Vicat softening temperature, 120°C/h 50N | 140 | °C | ISO 306 |
| ASTM Data | | | |
| DTUL @ 264 psi | 120 | °C | ASTM D 648 |
| Vicat Temperature | 138 | °C | ASTM D 1525 |

Electrical properties

| | Value | Unit | Test Standard |
|---------------------|-------|--------|---------------|
| ASTM Data | | | |
| Surface Resistivity | 1E15 | Ohm | ASTM D 257 |
| Volume Resistivity | 1E15 | Ohm*cm | ASTM D 257 |

| Other properties | Value | Unit | Test Standard |
|---------------------|-------------|-------------------|----------------|
| Water absorption | 0.24 | % | Sim. to ISO 62 |
| Humidity absorption | 0.09 | % | Sim. to ISO 62 |
| Density | 1190 | kg/m ³ | ISO 1183 |
| Density | 1190 | kg/m ³ | ASTM D 792 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|------------------|------|---------------|
| Pre-drying - Temperature | 120 | °C | - |
| Pre-drying - Time | 3 - 4 | h | - |
| Processing humidity | ≤0.02 | % | - |
| Melt temperature | 295 - 315 | °C | - |
| Mold temperature | 70 - 95 | °C | - |
| Zone 1 | 270 - 295 | °C | - |
| Zone 2 | 280 - 305 | °C | - |
| Zone 3 | 295 - 315 | °C | - |
| Screw speed | 40 - 70 | rpm | - |
| Back pressure | 0.3 - 0.7 | MPa | - |

Characteristics

Processing

Injection Molding

Special Characteristics

Ethylene Oxide (ETO) Sterilization

Certifications

US Pharmacopeia Class VI Approved

Applications

Medical

Regional Availability

Europe