

CELANEX® 6402R

PBT-(GF+MD)40

Celanese

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|--|-------|------|-----------------|
| ISO Data | | | |
| ^[C] Molding shrinkage, parallel | 0.1 | % | ISO 294-4, 2577 |
| ^[C] Molding shrinkage, normal | 0.5 | % | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties | Value | Unit | Test Standard |
|--|-------|-------------------|---------------|
| ISO Data | | | |
| ^[C] Tensile Modulus | 13500 | MPa | ISO 527 |
| ^[C] Stress at break | 147 | MPa | ISO 527 |
| ^[C] Strain at break | 2.1 | % | ISO 527 |
| ^[C] Charpy notched impact strength, +23°C | 7.5 | kJ/m ² | ISO 179/1eA |

[C]: CAMPUS

| Thermal properties | Value | Unit | Test Standard |
|---|-------|------|---------------|
| ISO Data | | | |
| ^[C] Temp. of deflection under load, 1.80 MPa | 205 | °C | ISO 75-1/-2 |

[C]: CAMPUS

| Other properties | Value | Unit | Test Standard |
|------------------------|-------|-------------------|---------------|
| ^[C] Density | 1660 | kg/m ³ | ISO 1183 |

[C]: CAMPUS

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature | 121 | °C | - |
| Pre-drying - Time | 4 | h | - |
| Processing humidity | ≤0.02 | % | - |
| Melt temperature | 235 - 265 | °C | - |
| Mold temperature | 65 - 93 | °C | - |

Characteristics**Processing**

Injection Molding

Certifications

Recycled Resin Content

Delivery form

Pellets

Regional Availability

North America, Europe, South and Central America

Additives

Release agent

Other text information**Injection molding**

To avoid hydrolytic degradation during processing, CELANEX resins have to be dried to a moisture level equal to or less than 0.02%. Drying should be done in a dehumidifying hopper dryer capable of dewpoints <-30°F (-34°C) at 250°F (121°C) for minimum 4 hours.

Rear Temperature 450-480 (230-250) deg F (deg C)
 Center Temperature 460-490(235-255) deg F (deg C)
 Front Temperature 470-500 (240-260) deg F (deg C)
 Nozzle Temperature 480-510 (250-265) deg F (deg C)
 Melt Temperature 460-510 (235-265) deg F (deg C)
 Mold Temperature 150-200(65-93) deg F (deg C)
 Back Pressure 0-50 psi
 Screw Speed Medium
 Injection Speed Fast

Injection speed, injection pressure and holding pressure have to be optimized to the individual article geometry. To avoid material

degradation during processing low back pressure and minimum screw speed have to be used. Overheating of the material has to be avoided, in particular for flame retardant grades. Up to 25% clean and dry regrind may be used.