CELSTRAN® PP-GF40-02 | PP | Glass Reinforced

**Description**

40% long strand glass fiber reinforced polypropylene

<table>
<thead>
<tr>
<th>Physical properties</th>
<th>Value</th>
<th>Unit</th>
<th>Test Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>1210</td>
<td>kg/m³</td>
<td>ISO 1183</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mechanical properties</th>
<th>Value</th>
<th>Unit</th>
<th>Test Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile modulus (1mm/min)</td>
<td>7700</td>
<td>MPa</td>
<td>ISO 527-2/1A</td>
</tr>
<tr>
<td>Tensile stress at break (5mm/min)</td>
<td>102</td>
<td>MPa</td>
<td>ISO 527-2/1A</td>
</tr>
<tr>
<td>Tensile strain at break (5mm/min)</td>
<td>2.1</td>
<td>%</td>
<td>ISO 527-2/1A</td>
</tr>
<tr>
<td>Flexural modulus (23°C)</td>
<td>8060</td>
<td>MPa</td>
<td>ISO 178</td>
</tr>
<tr>
<td>Flexural strength (23°C)</td>
<td>180</td>
<td>MPa</td>
<td>ISO 178</td>
</tr>
<tr>
<td>Charpy notched impact strength @ 23°C</td>
<td>23</td>
<td>kJ/m²</td>
<td>ISO 179/1eA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Thermal properties</th>
<th>Value</th>
<th>Unit</th>
<th>Test Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTUL @ 1.8 MPa</td>
<td>152</td>
<td>°C</td>
<td>ISO 75-1/-2</td>
</tr>
</tbody>
</table>

**Typical injection moulding processing conditions**

Maximum residual moisture content: 0.2000%

**Processing Temperatures:**

<table>
<thead>
<tr>
<th>Cavity</th>
<th>Melt</th>
<th>Hot Runner</th>
<th>Die</th>
<th>2</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>Feeding</th>
<th>Hopper</th>
</tr>
</thead>
<tbody>
<tr>
<td>min (°C)</td>
<td>40</td>
<td>230</td>
<td>N/A</td>
<td>230</td>
<td>230</td>
<td>220</td>
<td>210</td>
<td>20</td>
<td>N/A</td>
</tr>
<tr>
<td>max (°C)</td>
<td>70</td>
<td>250</td>
<td>N/A</td>
<td>250</td>
<td>250</td>
<td>240</td>
<td>220</td>
<td>50</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Processing Pressures:**

No info

**Injection speed:**

**Screw speed:**

Screw diameter (mm) | 40 | 55 | 75
Pre-drying conditions:
It is normally not necessary to dry CELSTRAN PP. However, should there be surface moisture (condensate) on the molding compound as a result of incorrect storage, drying is required.

The product can then be stored in standard conditions until processed.

Drying time: 2.00 h

Drying temperature: 90 - 100 °C

Special information:
Celstran TPU:
Melt temperature < 275 °C (527 °F)

Injection Molding

Celstran can be processed on a standard injection molding unit.
A general purpose metering screw is recommended with a zone distribution of 40% feed, 40% transition, and 20% metering.
A free flowing check ring assembly is recommended.

Melt Temp: 215-225°C.
Mold Temp: 65-75°C.

Contact Information

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**0,06€/Call + local landline rates

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Properties of molded parts can be influenced by a wide variety of factors including, but not limited to, material selection, additives, part design, processing conditions and environmental exposure. Any determination of the suitability of a particular material and part design for any use contemplated by the users and the manner of such use is the sole responsibility of the users, who must assure themselves that the material as subsequently processed meets the needs of their particular product or use.

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