Ticona

# CELANEX 4002 | Impact Modified

New Entry

**unfilled, high impact PBT**

| Physical Properties | Value | Unit | Test Standard |
|---|---|---|---|
| Density | **1240** | kg/m³ | ISO 1183 |
| Melt flow rate (MFR) | **4** | g/10 min | ISO 1133 |
| MFR test temperature | **250** | °C | ISO 1133 |
| MFR test load | **2.16** | Kg | ISO 1133 |
| **Mechanical Properties** | **Value** | **Unit** | **Test Standard** |
| Tensile modulus (1mm/min) | **1450** | MPa | ISO 527-2/1A |
| Tensile stress at yield (50mm/min) | **32** | MPa | ISO 527-2/1A |
| Tensile strain at yield (50mm/min) | **4.0** | % | ISO 527-2/1A |
| Tensile stress at break (50mm/min) | **28** | Mpa | ISO 527-2/1A |
| Tensile strain at break (50mm/min) | **90** | % | ISO 527-2/1A |
| Flexural modulus (23°C) | **1450** | MPa | ISO 178 |
| Flexural strength (23°C) | **50.0** | MPa | ISO 178 |
| Notched impact strength (Izod) @ 23°C | **75.0** | KJ/m² | ISO 180/1A |
| **Thermal Properties** | **Value** | **Unit** | **Test Standard** |
| Melting temperature (10°C/min) | **225** | °C | ISO 11357-1,-2,-3 |
| DTUL @ 1.8 MPa | **49** | °C | ISO 75-1, -2 |
| **Processing Properties** | **Value** | **Unit** | **Test Standard** |
| Processing method | **injection molding** | | Internal |
| Rear temperature | **450-470 (230-240)** | °F (°C) | Internal |
| Center temperature | **455-482 (235-250)** | °F (°C) | Internal |
| Front temperature | **470-500 (240-260)** | °F (°C) | Internal |
| Nozzle temperature | **482- 00 (250-260)** | °F (°C) | Internal |
| Melt temperature | **482-518 (250-270)** | °F (°C) | Internal |
| Mold temperature | **149-248 (65-120)** | °F (°C) | Internal |
| Back pressure | **0-50** | psi | Internal |
| Drying | **4 hrs at 250 deg F, <.02% moisture** | | Internal |
| Regrind | **up to 25%, clean and dry** | % | Internal |

## Disclaimer

Disclaimer:
NOTICE TO USERS: Values shown are based on testing of laboratory test specimens and represent data that fall within the standard range of properties for natural material. Colorants or other additives may cause significant variations in data values. These values are not intended for use in establishing maximum, minimum, or ranges of values for specification purposes. Any determination of the suitability of this material 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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We strongly recommend that users seek and adhere to the manufacturer's or supplier's current instructions for handling each material they use. Please consult the nearest Ticona Sales Office, or call the telephone numbers listed above for additional technical information. Call Customer Services for the appropriate Materials Safety Data Sheets (MSDS) before attempting to process these products.

Product is not intended for use in medical or dental implants.

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