

**Product Texts**

High viscosity extrusion grade for microtubes in fibre optical cable applications.

Abbreviated designation according to ISO 1043-1: PBT

| Processing/Physical Characteristics       | Value | Unit                   | Test Standard |
|---|-------|------------------------|---------------|
| <b>ISO Data</b>                           |       |                        |               |
| <sup>[C]</sup> Melt volume-flow rate, MVR | 6     | cm <sup>3</sup> /10min | ISO 1133      |
| Temperature                               | 250   | °C                     | -             |
| Load                                      | 2.16  | kg                     | -             |

[C]: CAMPUS

| Mechanical properties                                | Value | Unit              | Test Standard |
|--|-------|-------------------|---------------|
| <b>ISO Data</b>                                      |       |                   |               |
| <sup>[C]</sup> Tensile Modulus                       | 2500  | MPa               | ISO 527       |
| <sup>[C]</sup> Yield stress                          | 55    | MPa               | ISO 527       |
| <sup>[C]</sup> Yield strain                          | 10    | %                 | ISO 527       |
| <sup>[C]</sup> Nominal strain at break               | >50   | %                 | ISO 527       |
| <sup>[C]</sup> Charpy impact strength, +23°C         | 280   | kJ/m <sup>2</sup> | ISO 179/1eU   |
| <sup>[C]</sup> Charpy notched impact strength, +23°C | 5     | kJ/m <sup>2</sup> | ISO 179/1eA   |

[C]: CAMPUS

| Thermal properties                           | Value | Unit | Test Standard  |
|--|-------|------|----------------|
| <b>ISO Data</b>                              |       |      |                |
| <sup>[C]</sup> Melting temperature, 10°C/min | 223   | °C   | ISO 11357-1/-3 |

[C]: CAMPUS

| Other properties                   | Value | Unit              | Test Standard  |
|------------------------------------|-------|-------------------|----------------|
| <sup>[C]</sup> Water absorption    | 0.4   | %                 | Sim. to ISO 62 |
| <sup>[C]</sup> Humidity absorption | 0.25  | %                 | Sim. to ISO 62 |
| <sup>[C]</sup> Density             | 1300  | kg/m <sup>3</sup> | ISO 1183       |

[C]: CAMPUS

| Material specific properties    | Value | Unit               | Test Standard       |
|---------------------------------|-------|--------------------|---------------------|
| <b>ISO Data</b>                 |       |                    |                     |
| <sup>[C]</sup> Viscosity number | 145   | cm <sup>3</sup> /g | ISO 307, 1157, 1628 |

[C]: CAMPUS

| Processing Recommendation Injection Molding | Value     | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature                    | 80 - 120  | °C   | -             |
| Pre-drying - Time                           | 4         | h    | -             |
| Processing humidity                         | ≤0.04     | %    | -             |
| Melt temperature                            | 260 - 270 | °C   | -             |
| Mold temperature                            | 40 - 80   | °C   | -             |

| Processing Recommendation Extrusion | Value     | Unit | Test Standard |
|-------------------------------------|-----------|------|---------------|
| Pre-drying - Temperature            | 80 - 120  | °C   | -             |
| Pre-drying - Time                   | 4         | h    | -             |
| Processing humidity                 | ≤0.04     | %    | -             |
| Melt temperature                    | 250 - 275 | °C   | -             |

**Characteristics**

**Processing**

Injection Molding, Film Extrusion, Pipe/Tube Extrusion, Profile Extrusion, Sheet Extrusion, Other Extrusion

**Regional Availability**

North America, Europe, Asia Pacific

**Delivery form**

Pellets

**Other text information****Injection molding**

## PREPROCESSING

Pre/Post-processing, max. allowed water content: .04 %

Pre/Post-processing, Pre-drying, Temperature: 80 - 120 °C

Pre/Post-processing, Pre-drying, Time: 4 h

## PROCESSING

injection molding, Melt temperature, range: 260 - 270 °C

injection molding, Melt temperature, recommended: 260 °C

injection molding, Mold temperature, range: 40 - 80 °C

injection molding, Mold temperature, recommended: 60 °C

**Other extrusion**

## PREPROCESSING

Pre/Post-processing, max. allowed water content: .04 %

Pre/Post-processing, Pre-drying, Temperature: 80 - 120 °C

Pre/Post-processing, Pre-drying, Time: 4 h

## PROCESSING

Extrusion, Prepreg, Melt temperature: 250 - 270 °C

Extrusion, Pipes, Melt temperature: 250 - 270 °C

Extrusion, cable sheathing, Melt temperature: 260 - 275 °C

**Profile extrusion**

## PREPROCESSING

Pre/Post-processing, max. allowed water content: .04 %

Pre/Post-processing, Pre-drying, Temperature: 80 - 120 °C

Pre/Post-processing, Pre-drying, Time: 4 h

## PROCESSING

Extrusion, Profiles, Melt temperature: 250 - 270 °C

**Sheet extrusion**

## PREPROCESSING

Pre/Post-processing, max. allowed water content: .04 %

Pre/Post-processing, Pre-drying, Temperature: 80 - 120 °C

Pre/Post-processing, Pre-drying, Time: 4 h

## PROCESSING

Extrusion, Plates, Melt temperature: 250 - 270 °C