VESTODUR® X7396

PBT | Evonik Operations GmbH

Product Texts

Low-shrinkage, polymer-modified polybutylene terephthalate compound

VESTODUR® X7396 is an unreinforced, heat-stabilized and polymer-modified polybutylene terephthalate (PBT) compound with low shrinkage for extrusion.

The compound is especially suitable for the manufacture of stiff, small-diameter tubing, e.g. loose buffering for fiber optics.

Compared with standard PBT compounds VESTODUR® X7396 has a higher hardness. This permits cable jacketing as a protective cover against rodent attacks.

VESTODUR® X7396 is supplied as cylindrical pellets in polyethylene packaging.

In the brochure "Engineering thermoplastics for high performance secondary fiber optic jacketing" instructions are given on the extrusion of loose or tight buffering for fiber optics.

For information please follow the general recommendations in our flyer "VESTODUR® Polybutylene terephthalate - Compounds".

The use of colorants may affect property values.

Inside the original and undamaged packaging, the product has a shelf life of at least 2 years when stored in dry rooms at tempIeratures not exceeding 30°C.

The values presented are typical or average values, they do not constitute a specification.

FOR FURTHER INFORMATION PLEASE CONTACT US AT EVONIK-HP@EVONIK.COM
OR VISIT OUR PRODUCT AT WWW.VESTODUR.COM

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**43**	cm³/10min	ISO 1133
Temperature	**250**	°C	-
Load	**10**	kg	-
[C] Molding shrinkage, parallel	**1.3**	%	ISO 294-4, 2577
[C] Molding shrinkage, normal	**1.3**	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**2600**	MPa	ISO 527
[C] Yield stress	**65**	MPa	ISO 527
[C] Yield strain	**4**	%	ISO 527
[C] Nominal strain at break	**>50**	%	ISO 527
[C] Charpy impact strength, +23°C	**N**	kJ/m²	ISO 179/1eU
[C] Charpy impact strength, -30°C	**220**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**5.5**	kJ/m²	ISO 179/1eA
[C] Type of failure	**C**	-	-
[C] Charpy notched impact strength, -30°C	**4.5**	kJ/m²	ISO 179/1eA
[C] Type of failure	**C**	-	-

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			

[C] Melting temperature, 10°C/min	**220**	°C	ISO 11357-1/-3
[C] Glass transition temperature, 10°C/min	**56**	°C	ISO 11357-1/-2
[C] Temp. of deflection under load, 1.80 MPa	**65**	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**85**	°C	ISO 75-1/-2
[C] Vicat softening temperature, B	**115**	°C	ISO 306
[C] Burning Behav. at 1.5 mm nom. thickn.	**HB**	class	IEC 60695-11-10
Thickness tested	**1.6**	mm	-
[C] Burning Behav. at thickness h	**HB**	class	IEC 60695-11-10
Thickness tested	**0.8**	mm	-

[C]: CAMPUS

Other properties	**Value**	**Unit**	**Test Standard**
[C] Water absorption	**0.48**	%	Sim. to ISO 62
[C] Humidity absorption	**0.35**	%	Sim. to ISO 62
[C] Density	**1250**	kg/m³	ISO 1183

[C]: CAMPUS

Test specimen production	**Value**	**Unit**	**Test Standard**
ISO Data			
[C] Processing conditions acc. ISO	**7792**	-	ISO ....-2
[C] Injection Molding, melt temperature	**260**	°C	ISO 294
Injection Molding, mold temperature	**80**	°C	ISO 294
Injection Molding, injection velocity	**200**	mm/s	ISO 294
Injection Molding, pressure at hold	**70**	MPa	ISO 294

[C]: CAMPUS

Characteristics

Processing
Film Extrusion, Pipe/Tube Extrusion, Other Extrusion

Delivery form
Pellets

Special Characteristics
U.V. stabilized or stable to weather, Heat stabilized or stable to heat

Regional Availability
North America, Europe, Asia Pacific, South and Central America, Near East/Africa