VESTODUR® X7190

PBT — Evonik Operations GmbH

Product Texts

Low-shrinkage, polymer-modified polybutylene terephthalate compound

VESTODUR® X7190 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® X7190 is harder and can also be used to protect as outer sheaths to protect electrical cables from the chewing of rodents.

This compound contains a processing aid which facilitates feeding in the extrusion process.

VESTODUR® X7190 is supplied as cylindrical pellets in polyethylene packaging.

For information about processing of VESTODUR, please follow the general recommendations in our brochure "VESTODUR Handling and Processing".

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

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	**8**	cm³/10min	ISO 1133
Temperature	**250**	°C	-
Load	**2.16**	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	**2400**	MPa	ISO 527
[C] Yield stress	**61**	MPa	ISO 527
[C] Yield strain	**6.5**	%	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	**N**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**6.5**	kJ/m²	ISO 179/1eA
[C] Type of failure	**C**	-	-
[C] Shore D hardness	**87**	-	ISO 7619-1

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
[C] Temp. of deflection under load, 1.80 MPa	**68**	°C	ISO 75-1/-2
[C] Temp. of deflection under load, 0.45 MPa	**112**	°C	ISO 75-1/-2
[C] Vicat softening temperature, B	**150**	°C	ISO 306
[C] Coeff. of linear therm. expansion, parallel	**70**	E-6/K	ISO 11359-1/-2
[C] Coeff. of linear therm. expansion, normal	**70**	E-6/K	ISO 11359-1/-2
[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] Density	**1280**	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
Injection Molding, Pipe/Tube Extrusion, Profile Extrusion, Sheet Extrusion, Other Extrusion

Delivery form
Pellets

Special Characteristics
Heat stabilized or stable to heat

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