VESTODUR®

Product Information

VESTODUR® X7085 BK V306020

GLASS FIBER-REINFORCED POLYBUTYLENE TEREPHTHALATE COMPOUND FOR PARTS WITH HIGH SURFACE QUALITY

VESTODUR X7085 BK V306020 is a 45% glass fiber- reinforced, polymer-modified polybutylene terephthalate compound for injection molding.

The compound is suitable for parts that are subjected to high mechanical and thermal loads. Compared with commonly used glass fiber-reinforced PBT compounds with similar stiffness parts of VESTODUR X7085 have in particular a high surface quality.

VESTODUR X7085 BK V306020 is supplied as cylindrical pellets in polyethylene packaging.

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 templeratures not exceeding 30°C.

Key Features

Industrial Sector
Automotive and Mobility

Processing
Injection molding

Delivery form
Pellets, Granules

Resistance to
Heat (thermal stability)

Conformity
Automotive

Additives
Glass fibers

Mechanical properties ISO	dry	Unit	Test Standard
Tensile modulus	**15500**	MPa	ISO 527
Tensile strength	**180**	MPa	ISO 527
Stress at break	**180**	MPa	ISO 527

Strain at break, B	**2**	%	ISO 527
Charpy impact strength, +23°C	**71**	kJ/m²	ISO 179/1eU
Type of failure	**C**	-	-
Charpy impact strength, -30°C	**50**	kJ/m²	ISO 179/1eU
Type of failure	**C**	-	-
Charpy notched impact strength, +23°C	**12**	kJ/m²	ISO 179/1eA
Type of failure	**C**	-	-
Charpy notched impact strength, -30°C	**12**	kJ/m²	ISO 179/1eA
Type of failure	**C**	-	-
Flexural modulus, 23°C	**14400**	MPa	ISO 178
Flexural strength, 23°C	**272**	MPa	ISO 178
Flexural strain at flexural strength, 23°C	**2.3**	%	ISO 178
Flexural stress at break, 23°C	**272**	MPa	ISO 178
Flexural strain at break, 23°C	**2.3**	%	ISO 178

Thermal properties	**dry**	**Unit**	**Test Standard**
Temp. of deflection under load A, 1.80 MPa	**210**	°C	ISO 75-1/-2
Temp. of deflection under load B, 0.45 MPa	**223**	°C	ISO 75-1/-2
Vicat softening temperature A, 10 N, 50 K/h	**220**	°C	ISO 306
Vicat softening temperature B, 50 N, 50 K/h	**210**	°C	ISO 306

Physical properties	**dry**	**Unit**	**Test Standard**
Density	**1700**	kg/m³	ISO 1183
Water absorption	**0.4**	%	Sim. to ISO 62
Density	**1700**	kg/m³	ASTM D 792

Burning Behav.	**dry**	**Unit**	**Test Standard**
Burning behav. at 1.5 mm nom. thickn.	**HB**	class	IEC 60695-11-10
Thickness tested	**1.6**	mm	-

Burning behav. at thickness h	**HB**	class	IEC 60695-11-10
Thickness tested	**0.8**	mm	-

Rheological properties	dry	Unit	Test Standard
Melt volume-flow rate, MVR	**12**	cm^3/10min	ISO 1133
Temperature	**250**	°C	-
Load	**2.16**	kg	-
Molding shrinkage, parallel	**0.1**	%	ISO 294-4, 2577
Molding shrinkage, normal	**1.3**	%	ISO 294-4, 2577
Mold temperature	**80**	°C	-

Test specimen production	dry	Unit	Test Standard
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

Characteristics

Applications
Encapsulation

Color
Black

Special Characteristics
High heat resistant, Low warpage / Low shrinkage

Additives
Heat stabilizer