

Product Information

VESTODUR® X4195

EASY FLOWING POLYBUTYLENE TEREPHTHALATE COMPOUND WITH INCREASED FLEXIBILITY AND IMPACT STRENGTH



VESTODUR® X4195 is an easy flowing, semi- crystalline polyester compound based on modified polybutylene terephthalate (PBT).

Parts made of this compound have an increased flexibility and impact strength.

VESTODUR® X4195 is supplied as cylindrical pellets in polyethylene packaging.

Pigmentation may affect values.

For further information about processing of VESTODUR® X4195, please follow the general recommendations in our brochure „VESTODUR® Handling and Processing.“

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

Key Features

Processing

Injection molding, Extrusion

Additives

Unfilled

Delivery form

Pellets, Granules

Mechanical properties ISO

	dry	Unit	Test Standard
Tensile modulus	480	MPa	ISO 527
Yield stress	27	MPa	ISO 527
Yield strain	20	%	ISO 527
Nominal strain at break, tB	>50	%	ISO 527

Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	250	kJ/m ²	ISO 179/1eU
Type of failure	P	-	-
Charpy notched impact strength, +23°C	25	kJ/m ²	ISO 179/1eA
Type of failure	C	-	-
Charpy notched impact strength, -30°C	4	kJ/m ²	ISO 179/1eA
Type of failure	C	-	-

Thermal properties	dry	Unit	Test Standard
Temp. of deflection under load A, 1.80 MPa	50	°C	ISO 75-1/-2
Temp. of deflection under load B, 0.45 MPa	90	°C	ISO 75-1/-2
Vicat softening temperature A, 10 N, 50 K/h	190	°C	ISO 306
Vicat softening temperature B, 50 N, 50 K/h	120	°C	ISO 306
Coeff. of linear therm. expansion, 23°C to 55 °C, parallel	130	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, 23°C to 55 °C, normal	130	E-6/K	ISO 11359-1/-2

Physical properties	dry	Unit	Test Standard
Density	1260	kg/m ³	ISO 1183
Water absorption	0.4	%	Sim. to ISO 62
Shore D hardness	70^[b]	-	ISO 7619-1
Density	1260	kg/m ³	ASTM D 792

b: 3 seconds

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	-
Oxygen index	25	%	ISO 4589-1/-2

Limiting Oxygen Index	25	%	ASTM D 2863
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Electrical properties	dry	Unit	Test Standard
Volume resistivity, V	>1E13	Ohm*m	IEC 62631-3-1
Relative permittivity, 100Hz	4	-	IEC 62631-2-1
Dissipation factor, 100Hz	350	E-4	IEC 62631-2-1
CTI, test solution A, 50 drops value	600	-	IEC 60112
Assessment of the insulation group	I	-	DIN EN 60664-1

Rheological properties	dry	Unit	Test Standard
Melt volume-flow rate, MVR	70	cm ³ /10min	ISO 1133
Temperature	250	°C	-
Load	2.16	kg	-
Molding shrinkage, parallel	2.0	%	ISO 294-4, 2577
Molding shrinkage, normal	2.0	%	ISO 294-4, 2577

Characteristics

Processing
Film extrusion

Special Characteristics
High impact strength, Semi-crystalline

Chemical Media Resistance

Acids

- ✓ Acetic Acid (5% by mass) (23°C)
- ✓ Citric Acid solution (10% by mass) (23°C)

Bases

- ✓ Sodium Hydroxide solution (1% by mass) (23°C)

Alcohols

- ✓ Isopropyl alcohol (23°C)
- ✓ Methanol (23°C)

VESTODUR®

✓ Ethanol (23°C)

Mineral oils

✓ SAE 10W40 multigrade motor oil (23°C)

Salt solutions

✓ Sodium Chloride solution (10% by mass) (23°C)

✓ Sodium Carbonate solution (20% by mass) (23°C)

✓ Sodium Carbonate solution (2% by mass) (23°C)

Other

✓ Water (23°C)