

**Product Texts**

**Modified polyphenylene ether (PPE), high heat resistant, 20 % glass fiber-reinforced**

**VESTORAN® X7342** is the registered trademark of the Evonik Operations GmbH for molding compounds containing poly-2,6-dimethyl-1,4-phenylene ether as polymeric constituent (poly-phenylene ether, PPE, also referred to as PPO).

As a material of amorphous structure, VESTORAN® X7342 shows very small mold shrinkage. Therefore molded parts have a very low tendency to warp.

Moldings of VESTORAN® X7342 are dimensionally stable and hydrolysis resistant even in hot water, but are more sensitive to organic solvents than semi-crystalline plastics. VESTORAN® X7342 is resistant to aqueous alkalines and acides, certain alcohols, and glycol solutions.

Due to the glass fiber-reinforcement the compound combines outstanding heat deflection temperature under load with high strength and rigidity. The even smaller shrinkage compared to non-reinforced VESTORAN® depends on the orientation of the glass fibers in the molded part.

VESTORAN® X7342 is supplied as cylindrical granules in polyethylene packaging.

Processing advice is given in a separate product information.

The use of colorants may affect property values.

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](mailto:EVONIK-HP@EVONIK.COM)

<b>Processing/Physical Characteristics</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Melt volume-flow rate, MVR	<b>40</b>	cm <sup>3</sup> /10min	ISO 1133
Temperature	<b>300</b>	°C	-
Load	<b>21.6</b>	kg	-
<sup>[C]</sup> Molding shrinkage, parallel	<b>0.2</b>	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	<b>0.4</b>	%	ISO 294-4, 2577
<sup>[C]</sup> Density of melt	<b>1010</b>	kg/m <sup>3</sup>	-
<sup>[C]</sup> Thermal conductivity of melt	<b>0.25</b>	W/(m K)	-
<sup>[C]</sup> Spec. heat capacity of melt	<b>1640</b>	J/(kg K)	-

[C]: CAMPUS

<b>Mechanical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	<b>6100</b>	MPa	ISO 527
<sup>[C]</sup> Stress at break	<b>108</b>	MPa	ISO 527
<sup>[C]</sup> Strain at break	<b>3.5</b>	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	<b>49</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Type of failure	<b>C</b>	-	-
<sup>[C]</sup> Charpy notched impact strength, +23°C	<b>13</b>	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Type of failure	<b>C</b>	-	-

[C]: CAMPUS

<b>Thermal properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	<b>165</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	<b>170</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Vicat softening temperature, B	<b>170</b>	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	<b>40</b>	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	<b>30</b>	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	<b>HB</b>	class	IEC 60695-11-10
Thickness tested	<b>1.6</b>	mm	-

<sup>[C]</sup> Burning Behav. at thickness h	<b>HB</b>	class	IEC 60695-11-10
Thickness tested	<b>0.8</b>	mm	-
Yellow Card available	<b>yes</b>	-	-

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Relative permittivity, 100Hz	<b>3</b>	-	IEC 62631-2-1
<sup>[C]</sup> Relative permittivity, 1MHz	<b>3.5</b>	-	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 100Hz	<b>80</b>	E-4	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 1MHz	<b>10</b>	E-4	IEC 62631-2-1
<sup>[C]</sup> Volume resistivity	<b>1E11</b>	Ohm*m	IEC 62631-3-1
<sup>[C]</sup> Comparative tracking index	<b>175</b>	-	IEC 60112

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
<sup>[C]</sup> Density	<b>1190</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Injection Molding, melt temperature	<b>300</b>	°C	ISO 294
Injection Molding, mold temperature	<b>80</b>	°C	ISO 294
Injection Molding, injection velocity	<b>200</b>	mm/s	ISO 294

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding

**Delivery form**

Pellets

**Special Characteristics**

Heat stabilized or stable to heat

**Features**

Amorphous, Low Warpage

**Chemical Resistance**

Acid Resistance, Alkali Resistance, Hydrolytically Stable

**Regional Availability**

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