

# Vyncolit® BXE650

<b>Description</b>	Vyncolit® BXE650 is an inorganic filled phenolic molding compound with excellent isotropic properties and superior dimensional stability. It is specially used for potable water applications.
<b>Generic identification</b>	>PF-(GB+GF)75< (according to ISO 11469: 2000)
<b>Main filler</b>	glass fiber and glass bead
<b>Resin</b>	novolac
<b>Color</b>	black
<b>Molding method</b>	compression, transfer, injection

PHENOLIC

	Properties <sup>1</sup>	Typical Value <sup>2</sup>	Unit	Method	
<b>Physical</b>	Density	<b>1.99</b>	g/cm <sup>3</sup>	ISO 1183	
	Apparent density	<b>0.75</b>	g/cm <sup>3</sup>	ISO 60	
	Molding shrinkage	<b>0.18</b>	%	ISO 2577	
	Post shrinkage	<b>0.04</b>	%	ISO 2577	
	Water absorption	<b>0.05</b>	%	ISO 62	
	Friction coefficient	Static Dynamic	<b>0.56</b> <b>0.54</b>	- -	
<b>Thermal</b>	Temperature of deflection under load	> <b>250</b> <b>178</b>	°C @ 1.8 MPa °C @ 8.0 MPa	ISO 75 Af ISO 75 Cf	
	Thermal conductivity	<b>0.51</b>	W/m K	ASTM E1461	
	UL-flammability <sup>3</sup>	3 mm 1.5 mm	- -	UL 94 UL 94	
	Coefficient of linear thermal expansion	Parallel	<b>16</b>	10 <sup>-6</sup> /°C	TMA
		Perpendicular	<b>24</b>	10 <sup>-6</sup> /°C	TMA
<b>Mechanical</b>	Flexural strength	<b>240</b>	MPa	ISO 178	
	Flexural modulus	<b>21</b>	GPa	ISO 178	
	Flexural strain at break	<b>1.19</b>	%	ISO 178	
	Tensile strength	<b>119</b>	MPa	ISO 527-1	
	Tensile Young's modulus	<b>23</b>	GPa	ISO 527-1	
	Tensile strain at break	<b>0.59</b>	%	ISO 527-1	
	Charpy impact strength	notched	<b>2.9</b>	kJ/m <sup>2</sup>	ISO 179-1
		unnotched	<b>13.6</b>	kJ/m <sup>2</sup>	ISO 179-1
Compressive strength	<b>434</b>	MPa	ISO 604		
<b>Electrical</b>	Surface resistivity	<b>2.5e+012</b>	Ohm	IEC 60093	
	Volume resistivity	<b>2.1e+014</b>	Ohm cm	IEC 60093	
	Electric strength	<b>20</b>	kV/mm	IEC 60243-1	
	Comparative tracking index (CTI)	<b>225</b>	V	IEC 60112	

**RoHS:** Vyncolit® BXE650 is in compliance with RoHS2 (2011/65/EU, Restriction of Hazardous Substances).

**WEEE:** Parts produced from Vyncolit® BXE650 are not subject to 'selective treatment' according to the Directive 2002/96/EC on Waste Electrical and Electronic Equipment.

**PFOS:** Vyncolit® BXE650 does not contain perfluorooctansulfonate (PFOS) according to European Directive 2006/122/EC.

**REACH/SVHC :** Vyncolit® BXE650 does not contain any Substances of Very High Concern (SVHC) as listed on the candidate list published by ECHA.

<sup>1</sup> Properties measured on injection molded test specimens - MPTS - ISO 3167.

<sup>2</sup> The reported values are averages, and are not intended for specification purposes. Contact your Vyncolit representative.

<sup>3</sup> UL measurement based on internal measurements, not UL-listed.