

**alfater PBT FV 20**

30% Glass Fibre



PROPERTIES	NORMS		UNITS	TYPICAL VALUES
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**1. PHYSICAL**

Specific weight	ASTM D792	ISO 1183	Gr/cm <sup>3</sup>	<b>1,45</b>
Water absorption 24h-23°C	ASTM D570	ISO 62	%	<b>0,3</b>
Mould Shrinkage	ASTM D955	---	%	<b>0,25&gt;&lt;1,5</b>
Melt flow index MFI (300°C-1,2Kg.)	ASTM D1238	ISO 1133	GR/10 <sup>1</sup>	-----
Light transmission	ASTM D1003	---	%	---
Index of refraction	ASTM D542	ISO R 489	---	---

**2. MECHANICAL**

Tensile strength at yield	ASTM D638	ISO R527	Mpa	<b>118</b>
Elongation at break	ASTM D638	ISO R527	%	<b>3</b>
Tensile modulus	ASTM D638	ISO R527	Mpa	<b>7400</b>
Flexural strength	ASTM D790	ISO178	Mpa	<b>185</b>
Flexural modulus	ASTM D790	ISO 178	Mpa	<b>6300</b>
Notched IZOD impact strength	ASTM D256	ISO180/4a	-----	-----
Thickness 3,2 mm 23°C			J/m	<b>70</b>
Thickness 3,2 mm -40°C			J/m	-----
Rockwell Hardness scale M	ASTM D785	ISO2039/2	---	<b>83</b>

**3. THERMAL**

Softening point VICAT 9,8 N-120°C/h	ASTM D1525/A	ISO 306/A	°C	<b>220</b>
Softening point VICAT 49 N-120°C/h	ASTM D1525/B	ISO 306/B	°C	<b>210</b>
Heat distortion. Temp. HDT 1,82 MPa	ASTM D648	ISO 75	°C	<b>200</b>
Ball thermal resistance	BS 3456	IEC 335	°C	-----
Limit use time----few hours	VDE 0304/P2-1	IEC216	°C	<b>200</b>
5.000	VDE 0304/P2-1	IEC 216	°C	<b>160</b>
20.000	VDE 0304/P2-1	IEC216	°C	<b>140</b>

**4. ELECTRICAL**

Surface resistivity	ASTM D257	IEC 93	Ohm	<b>10<sup>14</sup></b>
Dielectric strength	ASTM D149	IEC 243	KV/mm	<b>20</b>
Dielectric constant 1000 Hz	ASTM D150	IEC 250	----	<b>3,8</b>
Dissipation factor integr.-1000 Hz.	ASTM D150	IEC 250	----	<b>0,002</b>
Resistance to tracking( sol. A)	VDE 0303-P1	IEC 112	CTI val.	<b>400</b>

**5. FIRE REACTION**

Thickness 1,6mm	UL 94	-----	CLASS	<b>HB</b>
Thickness 3,2mm	UL 94	-----	CLASS	<b>HB</b>
Glow-Wire Thickness 3.2mm	VDE 0471/P2-4	IEC 695	°C	-----
Glow-wire Thickness 2mm	VDE 0471/P2-4	IEC 695	°C	-----

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The values given are only indicative for customer's uses and do not dispense client to effect his own controls.  
Product application, use and processing made out our control are only on customer's responsibility.