

**Product Texts**

OMNITECH® PBT FR GF30 is a non-exuding flame retarded, 30% fiberglass reinforced polybutylene terephthalate which has an excellent balance of mechanical properties and processability.

Flammability at thickness h (1.5 V-0 mm)

UL recognition (h)

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	<b>0.2</b>	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	<b>1.1</b>	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	<b>11200</b>	MPa	ISO 527
<sup>[C]</sup> Stress at break	<b>125</b>	MPa	ISO 527
<sup>[C]</sup> Strain at break	<b>2</b>	%	ISO 527
<sup>[C]</sup> Charpy impact strength, +23°C	<b>36</b>	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	<b>8</b>	kJ/m <sup>2</sup>	ISO 179/1eA

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	<b>203</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	<b>219</b>	°C	ISO 75-1/-2
<sup>[C]</sup> Burning Behav. at thickness h	<b>V-0</b>	class	IEC 60695-11-10
Thickness tested	<b>1.5</b>	mm	-
Yellow Card available	<b>yes</b>	-	-
<sup>[C]</sup> Burning Behav. 5V at thickness h	<b>5VA</b>	class	IEC 60695-11-20
Thickness tested	<b>2.5</b>	mm	-
Yellow Card available	<b>yes</b>	-	-

[C]: CAMPUS

Other properties	Value	Unit	Test Standard
<sup>[C]</sup> Humidity absorption	<b>0.2</b>	%	Sim. to ISO 62
<sup>[C]</sup> Density	<b>1600</b>	kg/m <sup>3</sup>	ISO 1183

[C]: CAMPUS

**Characteristics**

**Processing**

Injection Molding

**Additives**

Lubricants

**Delivery form**

Pellets

**Other text information**

**Injection molding**

To avoid hydrolytic degradation during processing, PBT resins have to be dried to a moisture level equal to or less than 0.02%. Drying should be done in a dehumidifying hopper dryer capable of dewpoints <-30°F (-34°C) at 240°F (115°C) for 3-4 hours..

Injection speed, injection pressure and holding pressure have to be optimized to the individual article geometry. To avoid material degradation during processing low back pressure and minimum screw speed have to be used. Overheating of the material has to be avoided, in particular for flame retardant grades.