

**Product Texts**

Injection Molding, 30% Glass Reinforced, Heat Stabilized, Recycled Content

ISO 1043 PA6-GF30

Processing/Physical Characteristics	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Molding shrinkage, parallel	0.3 / *	%	ISO 294-4, 2577
<sup>[C]</sup> Molding shrinkage, normal	0.7 / *	%	ISO 294-4, 2577

[C]: CAMPUS

Mechanical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Tensile Modulus	9500 / 5800	MPa	ISO 527
<sup>[C]</sup> Stress at break	170 / 100	MPa	ISO 527
<sup>[C]</sup> Strain at break	3.5 / 6	%	ISO 527
Flexural modulus, 23°C	8500 / 5000	MPa	ISO 178
Flexural strength	270 / 160	MPa	ISO 178
<sup>[C]</sup> Tensile creep modulus, 1h	* / 5100	MPa	ISO 899-1
<sup>[C]</sup> Tensile creep modulus, 1000h	* / 4100	MPa	ISO 899-1
<sup>[C]</sup> Charpy impact strength, +23°C	75 / 90	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy impact strength, -30°C	65 / 60	kJ/m <sup>2</sup>	ISO 179/1eU
<sup>[C]</sup> Charpy notched impact strength, +23°C	10 / 20	kJ/m <sup>2</sup>	ISO 179/1eA
<sup>[C]</sup> Charpy notched impact strength, -30°C	- / 10	kJ/m <sup>2</sup>	ISO 179/1eA
Izod impact strength, +23°C	65 / 80	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C	10 / 20	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength	10 / 10	kJ/m <sup>2</sup>	ISO 180/1A
Temperature	-30	°C	-
<sup>[C]</sup> Puncture - maximum force, +23°C	1000 / 1230	N	ISO 6603-2
<sup>[C]</sup> Puncture - maximum force, -30°C	860 / -	N	ISO 6603-2
<sup>[C]</sup> Puncture energy, +23°C	3 / 6	J	ISO 6603-2
<sup>[C]</sup> Puncture energy, -30°C	3 / -	J	ISO 6603-2
Ball indentation hardness	210 / 100	MPa	ISO 2039-1

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Melting temperature, 10°C/min	222 / *	°C	ISO 11357-1/-3
<sup>[C]</sup> Temp. of deflection under load, 1.80 MPa	200 / *	°C	ISO 75-1/-2
<sup>[C]</sup> Temp. of deflection under load, 0.45 MPa	215 / *	°C	ISO 75-1/-2
Vicat softening temperature, B	200 / *	°C	ISO 306
<sup>[C]</sup> Coeff. of linear therm. expansion, parallel	20 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Coeff. of linear therm. expansion, normal	100 / *	E-6/K	ISO 11359-1/-2
<sup>[C]</sup> Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	-
Burning behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	-
<sup>[C]</sup> Oxygen index	22 / *	%	ISO 4589-1/-2
Glow Wire Flammability Index (GWFI)	700	°C	IEC 60695-2-12
GWFI - thickness tested (1)	1.5	mm	-

[C]: CAMPUS

Electrical properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
<sup>[C]</sup> Relative permittivity, 100Hz	4.2 / 12	-	IEC 62631-2-1
<sup>[C]</sup> Relative permittivity, 1MHz	3.8 / 4.4	-	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 100Hz	100 / 2550	E-4	IEC 62631-2-1
<sup>[C]</sup> Dissipation factor, 1MHz	170 / 780	E-4	IEC 62631-2-1
<sup>[C]</sup> Volume resistivity	1E13 / 1E10	Ohm*m	IEC 62631-3-1

**Durethan® BLUEBKV30H2.0 901510**

PA6-GF30

Envalior

[C] Surface resistivity	* / 1E13	Ohm	IEC 62631-3-2
[C] Electric strength	35 / 30	kV/mm	IEC 60243-1
[C] Comparative tracking index	425 / -	-	IEC 60112

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
[C] Water absorption	7 / *	%	Sim. to ISO 62
[C] Humidity absorption	2.1 / *	%	Sim. to ISO 62
[C] Density	1360 / -	kg/m <sup>3</sup>	ISO 1183
Bulk density	700	kg/m <sup>3</sup>	-

[C]: CAMPUS

Material specific properties	dry / cond	Unit	Test Standard
<b>ISO Data</b>			
[C] Viscosity number	140 / *	cm <sup>3</sup> /g	ISO 307, 1157, 1628

[C]: CAMPUS

Test specimen production	Value	Unit	Test Standard
<b>ISO Data</b>			
[C] Injection Molding, melt temperature	280	°C	ISO 294
Injection Molding, mold temperature	80	°C	ISO 294

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 6	h	-
Processing humidity	≤0.12	%	-
Melt temperature	270 - 290	°C	-
Mold temperature	80 - 120	°C	-

**Characteristics****Processing**

Injection Molding

**Certifications**

Contains renewable resources, Recycled Resin Content

**Delivery form**

Pellets

**Regional Availability**

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

**Special Characteristics**

Heat stabilized or stable to heat

**Other text information****Injection molding****PREPROCESSING**

Residual moisture content: 0.03 - 0.12%

Drying temperature dry air dryer: 80 °C

Drying time dry air dryer 2 - 6 h

**PROCESSING**

Melt temperature (Tmin - Tmax): 270 - 290 °C

Mold temperature: 80 - 120 °C