

## Eurostar Staramide BG6 PA6, 30% Glass Filled, Injection Molded

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6, 30% Glass Fiber Filled

### Material Notes:

BG6 is a 30% Glass Fiber Reinforced Polyamide 6 Injection Molding Resin. Information provided by Polymer Technology & Services, the North American exclusive supplier.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Eurostar-Staramide-BG6-PA6-30-Glass-Filled-Injection-Molded.php](http://www.lookpolymers.com/polymer_Eurostar-Staramide-BG6-PA6-30-Glass-Filled-Injection-Molded.php)

Physical Properties	Metric	English	Comments
Density	1.37 g/cc	0.0495 lb/in <sup>3</sup>	ISO 1183
Moisture Absorption	1.80 % @Temperature 23.0 °C	1.80 % @Temperature 73.4 °F	50% RH; ISO 62
Water Absorption at Saturation	6.5 % @Temperature 23.0 °C	6.5 % @Temperature 73.4 °F	ISO 62-1
Linear Mold Shrinkage, Flow	0.0020 - 0.0040 cm/cm	0.0020 - 0.0040 in/in	on Tensile Bar; ISO 294
Linear Mold Shrinkage, Transverse	0.0080 - 0.011 cm/cm	0.0080 - 0.011 in/in	on Tensile Bar; ISO 294

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell L	111	111	ISO 2039-2
Tensile Strength at Break	160 MPa	23200 psi	5 mm/min; ISO 527
Elongation at Break	3.7 %	3.7 %	5 mm/min; ISO 527
Tensile Modulus	8.00 GPa	1160 ksi	1 mm/min; ISO 527
Flexural Strength	230 MPa	33400 psi	2 mm/min; ISO 178
Flexural Modulus	8.00 GPa	1160 ksi	2 mm/min; ISO 178
Izod Impact, Notched (ISO)	9.00 kJ/m <sup>2</sup> @Temperature -30.0 °C	4.28 ft-lb/in <sup>2</sup> @Temperature -22.0 °F	Edgew 80x10x4 sp=62; ISO 180/1A
	9.00 kJ/m <sup>2</sup> @Temperature -40.0 °C	4.28 ft-lb/in <sup>2</sup> @Temperature -40.0 °F	Edgew 80x10x4 sp=62; ISO 180/1A
	10.0 kJ/m <sup>2</sup> @Temperature -20.0 °C	4.76 ft-lb/in <sup>2</sup> @Temperature -4.00 °F	Edgew 80x10x4 sp=62; ISO 180/1A
	11.0 kJ/m <sup>2</sup> @Temperature 23.0 °C	5.23 ft-lb/in <sup>2</sup> @Temperature 73.4 °F	Edgew 80x10x4 sp=62; ISO 180/1A

Mechanical Properties	Metric	English	Comments
Charpy Impact Unnotched	@Temperature -30.0 °C	@Temperature -22.0 °F	Edgew 80x10x4 sp=62; ISO 179/1eU
	9.00 J/cm <sup>2</sup>	42.8 ft-lb/in <sup>2</sup>	Edgew 80x10x4 sp=62; ISO 179/1eU
Charpy Impact, Notched	@Temperature 23.0 °C	@Temperature 73.4 °F	Edgew 80x10x4 sp=62; ISO 179/1eA
	0.900 J/cm <sup>2</sup>	4.28 ft-lb/in <sup>2</sup>	Edgew 80x10x4 sp=62; ISO 179/1eA
	@Temperature -30.0 °C	@Temperature -22.0 °F	Edgew 80x10x4 sp=62; ISO 179/1eA
	1.10 J/cm <sup>2</sup>	5.23 ft-lb/in <sup>2</sup>	Edgew 80x10x4 sp=62; ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	25.0 µm/m-°C	13.9 µin/in-°F	ISO 11359-2
	@Temperature 23.0 - 60.0 °C	@Temperature 73.4 - 140 °F	
CTE, linear, Transverse to Flow	85.0 µm/m-°C	47.2 µin/in-°F	ISO 11359-2
	@Temperature 23.0 - 60.0 °C	@Temperature 73.4 - 140 °F	
Thermal Conductivity	0.330 W/m-K	2.29 BTU-in/hr-ft <sup>2</sup> -°F	ISO 8302
Deflection Temperature at 0.46 MPa (66 psi)	220 °C	428 °F	Edgew 120x10x4, sp=100 mm; ISO 75/Bf
Deflection Temperature at 1.8 MPa (264 psi)	205 °C	401 °F	Edgew 120x10x4, sp=100 mm; ISO 75/Af
Vicat Softening Point	215 °C	419 °F	B/120; ISO 306
	215 °C	419 °F	B/50; ISO 306
UL RTI, Electrical	65.0 °C	149 °F	
	@Thickness 0.750 mm	@Thickness 0.0295 in	
	65.0 °C	149 °F	
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	65.0 °C	149 °F	
	@Thickness 3.00 mm	@Thickness 0.118 in	
UL RTI, Mechanical with Impact	65.0 °C	149 °F	
	@Thickness 0.750 mm	@Thickness 0.0295 in	
	65.0 °C	149 °F	
	@Thickness 1.50 mm	@Thickness 0.0591 in	

Thermal Properties	<sup>65.0 °C</sup> Metric	<sup>149 °F</sup> English	Comments
	@Thickness 3.00 mm	@Thickness 0.118 in	
UL RTI, Mechanical without Impact	65.0 °C	149 °F	
	@Thickness 0.750 mm	@Thickness 0.0295 in	
	65.0 °C	149 °F	
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	65.0 °C	149 °F	
	@Thickness 3.00 mm	@Thickness 0.118 in	
Flammability, UL94	HB	HB	IEC 60695-11-10
	@Thickness 0.750 mm	@Thickness 0.0295 in	
	HB	HB	IEC 60695-11-10
	@Thickness 1.50 mm	@Thickness 0.0591 in	
	HB	HB	IEC 60695-11-10
	@Thickness 3.00 mm	@Thickness 0.118 in	
Flame Spread	2.00 mm/min	0.0787 in/min	FMVSS Buring Speed
	@Thickness 3.00 mm	@Thickness 0.118 in	
	6.00 mm/min	0.236 in/min	FMVSS Buring Speed
	@Thickness 2.00 mm	@Thickness 0.0787 in	
Oxygen Index	25 %	25 %	ISO 4589
Glow Wire Test	650 °C	1200 °F	IEC 60695-2-12
	@Thickness 2.00 mm	@Thickness 0.0787 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+16 ohm-cm	>= 1.00e+16 ohm-cm	IEC 60093
Surface Resistance	>= 1.00e+16 ohm	>= 1.00e+16 ohm	ROA; IEC 60093
Dielectric Constant	3.4	3.4	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	3.6	3.6	IEC 60250
	@Frequency 50.0 - 60.0 Hz	@Frequency 50.0 - 60.0 Hz	
Dielectric Strength	20.0 kV/mm	508 kV/in	in oil; IEC 60243-1

Electrical Properties	@Thickness 3.20 mm Metric	@Thickness 0.126 in English	Comments
Dissipation Factor	0.0061	0.0061	IEC 60250
	@Frequency 50.0 - 60.0 Hz	@Frequency 50.0 - 60.0 Hz	
	0.016	0.016	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Comparative Tracking Index	375 V	375 V	M; IEC 60112
	500 V	500 V	IEC 60112

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	230 - 240 °C	446 - 464 °F	Zone 1
Middle Barrel Temperature	240 - 250 °C	464 - 482 °F	Zone 2
Front Barrel Temperature	240 - 270 °C	464 - 518 °F	Zone 3
Melt Temperature	240 - 270 °C	464 - 518 °F	
Mold Temperature	60.0 - 80.0 °C	140 - 176 °F	
Drying Temperature	75.0 - 85.0 °C	167 - 185 °F	
Dry Time	4.00 - 6.00 hour	4.00 - 6.00 hour	
Moisture Content	0.20 %	0.20 %	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China