

## Eurostar Staramide BG6U PA6, 30% Glass Fiber Filled, UV Stabilized, Injection Molded

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

### Material Notes:

Staramide BG6U is an UV Stabilized, 30% Glass Fiber Reinforced, Polyamide 6, Injection Molding Resin. Information provided by Eurostar.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Eurostar-Staramide-BG6U-PA6-30-Glass-Fiber-Filled-UV-Stabilized-Injection-Molded.php](http://www.lookpolymers.com/polymer_Eurostar-Staramide-BG6U-PA6-30-Glass-Fiber-Filled-UV-Stabilized-Injection-Molded.php)

Physical Properties	Metric	English	Comments
Density	1.36 g/cc	0.0491 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
Linear Mold Shrinkage, Flow	0.0020 - 0.0040 cm/cm	0.0020 - 0.0040 in/in	on Tensile Bar; E2P method

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell L	112	112	ISO 2039-2
Tensile Strength at Break	160 MPa	23200 psi	5 mm/min; ISO 527
Elongation at Break	3.6 %	3.6 %	5 mm/min; ISO 527
Tensile Modulus	9.50 GPa	1380 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 -40.0 °C	4.28 ft-lb/in <sup>2</sup> @Temperature -40.0 °F	80x10x4; 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	80x10x4; 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	80x10x4; ISO 180/1A
Charpy Impact Unnotched	7.50 J/cm <sup>2</sup> @Temperature -30.0 °C	35.7 ft-lb/in <sup>2</sup> @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>	

Mechanical Properties	Metric @ Temperature 23.0 °C	English @ Temperature 73.4 °F	Comments Edgew 80x10x4 sp=62; ISO 179/1eU
Charpy Impact, Notched	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	
	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/Be
Deflection Temperature at 1.8 MPa (264 psi)	210 °C	410 °F	Edgew 120x10x4, sp=100 mm; ISO 75/Ae
Vicat Softening Point	215 °C	419 °F	B/120; ISO 306
	215 °C	419 °F	B/50; ISO 306
Flammability, UL94	HB	HB	
	@Thickness 0.750 mm	@Thickness 0.0295 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	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	@Frequency 50.0 - 60.0	

Electrical Properties	Hz Metric	Hz English	Comments
Dielectric Strength	20.0 kV/mm @Thickness 3.20 mm	508 kV/in @Thickness 0.126 in	in oil; IEC 60243-1
Dissipation Factor	0.0061 @Frequency 50.0 - 60.0 Hz	0.0061 @Frequency 50.0 - 60.0 Hz	IEC 60250
	0.016 @Frequency 1.00e+6 Hz	0.016 @Frequency 1.00e+6 Hz	IEC 60250
Comparative Tracking Index	375 V	375 V	M; IEC 60112
	500 V	500 V	IEC 60112

Processing Properties	Metric	English	Comments
Zone 1	230 - 240 °C	446 - 464 °F	
Zone 2	240 - 250 °C	464 - 482 °F	
Zone 3	240 - 270 °C	464 - 518 °F	
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 @Time 14400 - 21600 sec	167 - 185 °F @Time 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