

Bergamid™ X2 B70 U NC Polyamide 6

Key Characteristics

General			
Material Status	Commercial: Active		
Regional Availability	 Africa & Middle East 	 Asia Pacific 	Europe
Additive	 Flame Retardant 	 Halogen 	
RoHS Compliance	RoHS Compliant		
Forms	• Pellets		
Processing Method	 Injection Molding 		

Technical Properties 1

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density ² (73°F (23°C))	1.27 g/cm ³	1.27 g/cm ³	DIN 53479
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	Typical Value (Eligibil)	Typical value (OI)	ISO 527-2/1
73°F (23°C), 0.157 in (4.00 mm)	551000 psi	3800 MPa	100 021 271
Tensile Stress			ISO 527-2/50
Yield, 73°F (23°C), 0.157 in (4.00 mm)	11200 psi	77.0 MPa	
Tensile Strain	•		ISO 527-2/50
Yield, 73°F (23°C), 0.157 in (4.00 mm)	3.2 %	3.2 %	
Flexural Modulus (73°F (23°C))	421000 psi	2900 MPa	ISO 178
Flexural Stress (73°F (23°C))	14200 psi	98.0 MPa	ISO 178
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	1.7 ft·lb/in²	3.6 kJ/m²	ISO 179
Charpy Unnotched Impact Strength			ISO 179
73°F (23°C)	No Break	No Break	
Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Melting Temperature (DSC)	433 °F	223 °C	ISO 3146
Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Surface Resistivity	> 1.0E+13 ohms	> 1.0E+13 ohms	IEC 60093
Volume Resistivity	> 1.0E+13 ohms·cm	> 1.0E+13 ohms·cm	IEC 60093
Comparative Tracking Index	275 V	275 V	IEC 60112
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating			UL 94
0.016 in (0.40 mm)	V-2	V-2	
0.031 in (0.8 mm), ALL	V-2	V-2	
0.06 in (1.6 mm)	V-2	V-2	
Glow Wire Flammability Index			IEC 60695-2-12
0.031 in (0.8 mm)	1760 °F	960 °C	
0.06 in (1.6 mm)	1760 °F	960 °C	
0.12 in (3.0 mm)	1760 °F	960 °C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.016 in (0.40 mm)	> 1520 °F	> 825 °C	
0.031 in (0.8 mm)	1520 °F	825 °C	
0.06 in (1.6 mm)	1520 °F	825 °C	

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Rev: 2014-05-15 Page: 1 of 2

Processing Information

Injection	Typical Value (English)	Typical Value (SI)	
Drying Temperature	176 °F	80 °C	
Drying Time	4.0 to 6.0 hr	4.0 to 6.0 hr	
Processing (Melt) Temp	446 to 500 °F	230 to 260 °C	
Mold Temperature	140 to 176 °F	60 to 80 °C	

Notes

¹ Typical values are not to be construed as specifications.

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Rev: 2014-05-15 Page: 2 of 2

² ±0.03 g/cm³