Bergamid™ ET6000-5005 EM FR HS Natural 70

Polyamide 6

Key Characteristics

General			
Material Status	• Commercial: Active		
Regional Availability	• Europe		
Features	• Flame Retardant • Good Heat Resistance • Good Impact Resistance	• Good Processability • Good Stiffness • Good Strength	• Medium Viscosity
Uses	• Appliances • Consumer Applications	• Electrical/Electronic Applications • General Purpose	• Industrial Applications
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.34	1.34	ISO 1183
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Modulus	435000 psi	3000 MPa	ISO 527-2/1
Tensile Stress	7980 psi	55.0 MPa	ISO 527-2/50
Tensile Strain (Yield)	4.0 %	4.0 %	ISO 527-2/50
Impact	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Notched Izod Impact Strength	4.8 ft·lb/in²	10 kJ/m²	ISO 180/A
Thermal	**Typical Value (English)**	**Typical Value (SI)**	
Melting Temperature	428 to 437 °F	220 to 225 °C	
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Flame Rating			Internal Method
0.06 to 0.13 in (1.6 to 3.2 mm)	V-0	V-0	
Glow Wire Flammability Index			IEC 60695-2-12
0.08 in (2.0 mm)	1760 °F	960 °C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.04 in (1.0 mm)	1430 °F	775 °C	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 to 194 °F	80 to 90 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Rear Temperature	455 to 473 °F	235 to 245 °C
Middle Temperature	464 to 482 °F	240 to 250 °C
Front Temperature	473 to 491 °F	245 to 255 °C
Nozzle Temperature	482 to 500 °F	250 to 260 °C
Mold Temperature	140 to 194 °F	60 to 90 °C

Notes

[1] Typical values are not to be construed as specifications.