

## Global EPP PA 6E Extruded Polyamide 6

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , Extruded

### Material Notes:

Polyamides, commonly referred to as nylons, are macromolecular, partially crystalline thermoplastics. Their physical properties are mainly determined by the composition and structure of their molecular chains. Their combined strengths and characteristics position them as obvious first choice materials for all components, subject to structural and wear conditions, in mechanical and plant engineering environments. Key characteristics: Excellent sliding and wear properties Perfect balance of mechanical strength, toughness and rigidity Good electrical insulating properties Various FDA compliant grades available This general-purpose grade offers an excellent blend of mechanical and impact strength, vibration damping and wear resistance. Complimenting these properties are good electrical insulation and favourable chemical resistance.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Global-EPP-PA-6E-Extruded-Polyamide-6.php](http://www.lookpolymers.com/polymer_Global-EPP-PA-6E-Extruded-Polyamide-6.php)

Physical Properties	Metric	English	Comments
Density	1.135 g/cc	0.04100 lb/in <sup>3</sup>	Test Method A; ISO 1183:1987
Moisture Absorption at Equilibrium	3.0 %	3.0 %	50% RH; ISO 62:1999
Water Absorption at Saturation	9.5 %	9.5 %	ISO 62:1999

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	82	82	ISO 868:2003
Tensile Strength at Break	80.0 MPa	11600 psi	Sample Type 1B, 50mm/min; ISO 527-1/2:1993
Elongation at Break	>= 30 %	>= 30 %	Sample Type 1B, 50 mm/min; ISO 527-1/2:1993
Modulus of Elasticity	3.50 GPa	508 ksi	Sample Type 1B, 50 mm/min; ISO 527-1/2:1993
Flexural Strength	80.0 MPa	11600 psi	1.5 mm/min; ISO 178:2001
Flexural Modulus	2.10 GPa	305 ksi	1.5 mm/min; ISO 178:2001
Compressive Strength	90.0 MPa	13100 psi	Sample Type B, 5 mm/min; ISO 604:2002
Compressive Modulus	2.60 GPa	377 ksi	Sample Type A, 1 mm/min; ISO 604:2002
Izod Impact, Notched (ISO)	8.00 kJ/m <sup>2</sup>	3.81 ft-lb/in <sup>2</sup>	Sample Type A; ISO 180:2000

Thermal Properties	Metric	English	Comments
CTE, linear	85.0 Åµm/m-Å°C	47.2 Åµin/in-Å°F	ISO 11359-2:1999

Thermal Properties	Metric @Temperature 23.0 - 35.0 Â°C	English @Temperature 73.4 - 139 Â°F	Comments
Thermal Conductivity	0.280 W/m-K	1.94 BTU-in/hr-ftÂ²- Â°F	ISO 8301:1991
Melting Point	220 Â°C	428 Â°F	
Maximum Service Temperature, Air	90.0 Â°C	194 Â°F	Continuous
	160 Â°C	320 Â°F	Intermittent
Deflection Temperature at 0.46 MPa (66 psi)	160 Â°C	320 Â°F	ISO 75
Deflection Temperature at 1.8 MPa (264 psi)	70.0 Â°C	158 Â°F	ISO 75
Minimum Service Temperature, Air	-40.0 Â°C	-40.0 Â°F	Continuous
Glass Transition Temp, Tg	60.0 Â°C	140 Â°F	ISO 11359-2:1999
Flammability, UL94	HB	HB	IEC 60695-11-10:2003-08

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+15 ohm-cm	1.00e+15 ohm-cm	IEC 60093:1980-01
Surface Resistance	1.00e+12 ohm	1.00e+12 ohm	IEC 60093:1980-01
Dielectric Constant	3.5	3.5	IEC 60250:1969-01
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
	3.9	3.9	IEC 60250:1969-01
	@Frequency 100 Hz	@Frequency 100 Hz	
Dielectric Strength	25.0 kV/mm	635 kV/in	IEC 60243-1:1998-01

Descriptive Properties	Value	Comments
Color	Natural, Black	

## Contact Songhan Plastic Technology Co.,Ltd.

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