

DuPont Performance Polymers Zytel® 80G14AHS BK099 Nylon 66 (Unverified Data**)

Category : Polymer , Thermoplastic , Nylon , Nylon 66 , Nylon 66, 10% Glass Fiber Filled

Material Notes:

Zytel® 80G14AHS BK099 is a 14% glass fiber reinforced, toughened, high flow, heat stabilized, black polyamide 66 resin. It offers outstanding performance in injection molding applications. Information provided by DuPont Performance Polymers

Order this product through the following link:

http://www.lookpolymers.com/polymer_DuPont-Performance-Polymers-Zytel-80G14AHS-BK099-Nylon-66-nbspUnverified-Data.php

Physical Properties	Metric	English	Comments
Density	1.19 g/cc	0.0430 lb/in ³	DAM; ISO 1183
Filler Content	14 %	14 %	DAM
Linear Mold Shrinkage, Flow	0.0070 cm/cm @Thickness 2.00 mm	0.0070 in/in @Thickness 0.0787 in	DAM; ISO 294-4
Linear Mold Shrinkage, Transverse	0.0090 cm/cm @Thickness 2.00 mm	0.0090 in/in @Thickness 0.0787 in	DAM; ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	110 MPa @Temperature 23.0 °C	16000 psi @Temperature 73.4 °F	DAM; ISO 527
Elongation at Break	3.8 % @Temperature 23.0 °C	3.8 % @Temperature 73.4 °F	DAM; ISO 527
Tensile Modulus	5.00 GPa @Temperature 23.0 °C	725 ksi @Temperature 73.4 °F	DAM; ISO 527
Flexural Modulus	4.40 GPa @Temperature 23.0 °C	638 ksi @Temperature 73.4 °F	DAM; ISO 178
Izod Impact, Notched (ISO)	6.00 kJ/m ² @Temperature -40.0 °C	2.86 ft-lb/in ² @Temperature -40.0 °F	DAM; ISO 180/1A
	11.0 kJ/m ² @Temperature 0.000 °C	5.23 ft-lb/in ² @Temperature 32.0 °F	DAM; ISO 180/1A
	13.0 kJ/m ² @Temperature 23.0 °C	6.19 ft-lb/in ² @Temperature 73.4 °F	DAM; ISO 180/1A
	55.0 kJ/m ²	26.2 ft-lb/in ²	

Impact Impact Unnotched (ISO) Mechanical Properties	Metric @ Temperature 23.0 °C	English @ Temperature 73.4 °F	DAM; ISO 180/TU Comments
Charpy Impact Unnotched	7.00 J/cm ² @ Temperature 23.0 °C	33.3 ft-lb/in ² @ Temperature 73.4 °F	DAM; ISO 179/1eU
Charpy Impact, Notched	1.30 J/cm ² @ Temperature 23.0 °C	6.19 ft-lb/in ² @ Temperature 73.4 °F	DAM; ISO 179/1eA

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	500 µm/m-°C @ Temperature -40.0 - 23.0 °C	278 µin/in-°F @ Temperature -40.0 - 73.4 °F	DAM; ISO 11359-1/-2
	500 µm/m-°C @ Temperature 23.0 - 55.0 °C	278 µin/in-°F @ Temperature 73.4 - 131 °F	DAM; ISO 11359-1/-2
	500 µm/m-°C @ Temperature 55.0 - 160 °C	278 µin/in-°F @ Temperature 131 - 320 °F	DAM; ISO 11359-1/-2
CTE, linear, Transverse to Flow	97.0 µm/m-°C @ Temperature -40.0 - 23.0 °C	53.9 µin/in-°F @ Temperature -40.0 - 73.4 °F	DAM; ISO 11359-1/-2
	104 µm/m-°C @ Temperature 23.0 - 55.0 °C	57.8 µin/in-°F @ Temperature 73.4 - 131 °F	DAM; ISO 11359-1/-2
	135 µm/m-°C @ Temperature 55.0 - 160 °C	75.0 µin/in-°F @ Temperature 131 - 320 °F	DAM; ISO 11359-1/-2
Melting Point	263 °C	505 °F	10°C/min; DAM; ISO 11357-1/-3
Deflection Temperature at 0.46 MPa (66 psi)	258 °C	496 °F	DAM; ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	240 °C	464 °F	DAM; ISO 75-1/-2

Processing Properties	Metric	English	Comments
Melt Temperature	295 °C	563 °F	DAM; Optimum
	285 - 305 °C	545 - 581 °F	DAM
Mold Temperature	50.0 - 100 °C	122 - 212 °F	DAM
	80.0 °C	176 °F	DAM; optimum

Processing Properties	Metric	English	Comments
Drying Temperature	80.0 °C	176 °F	DAM
Dry Time	2.00 - 4.00 hour	2.00 - 4.00 hour	DAM
Moisture Content	<= 0.20 %	<= 0.20 %	DAM

Descriptive Properties	Value	Comments
Additive	Heat Stabilizer	DAM
	Impact Modifier	DAM
Appearance	Black Color	DAM
Drying Recommended	Yes, if moisture content of resin exceeds recommended level	DAM
Features	Chemical Resistance, Good	DAM
	Fatigue Resistant	DAM
	Fuel Resistant	DAM
	Grease Resistant	DAM
	Heat Aging Resistance, Good	DAM
	Heat Stabilized	DAM
	Impact Modified	DAM
	Impact Resistance, Good	DAM
	Oil Resistant	DAM
	Thermal Aging Resistance, Good	DAM
	Toughness, Good	DAM
Filler	Glass fiber reinforcement	DAM
Forms	Pellets	DAM
Generic	Nylon 66	DAM
Material Status	Preliminary Data	DAM
Part Marking Code	>PA66-IGF14<	ISO 11469; DAM
Polymer Family	Polyamide	DAM
Polymer Type	PA66	DAM
Processing Method	Injection Molding	DAM

Descriptive Properties	Value Reinforced Resins	Comments
	Toughened Resins	DAM
Region Available - Global	Yes	DAM
Resin Identification	PA66-IGF14	ISO 1043; DAM
RoHS Compliance	Contact Manufacturer	DAM
Uses	Appliance Components	DAM
	Automotive Applications	DAM
	Electrical/Electronic Applications	DAM
	Industrial Applications	DAM

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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