

DuPont Performance Polymers Zytel® 444AHS BK152 Nylon 66 (Unverified Data**)

Category : Polymer , Thermoplastic , Nylon , Nylon 66

Material Notes:

Zytel® 444AHS is a toughened, heat stabilized, black polyamide 66 resin for injection molding. It is a high flow, processing friendly material. Information provided by DuPont Performance Polymers

Order this product through the following link:

http://www.lookpolymers.com/polymer_DuPont-Performance-Polymers-Zytel-444AHS-BK152-Nylon-66-nbspUnverified-Data.php

Physical Properties	Metric	English	Comments
Density	1.11 g/cc	0.0401 lb/in ³	DAM; ISO 1183
Water Absorption	1.3 %	1.3 %	Immersion 24h; DAM; ISO 62, Similar to
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	1.3 %	1.3 %	Saturation, immersed; DAM; ISO 62, Similar to
	@Thickness 1.00 mm, Temperature 23.0 °C	@Thickness 0.0394 in, Temperature 73.4 °F	
Linear Mold Shrinkage	0.016 cm/cm	0.016 in/in	Normal; DAM; ASTM D955
	@Thickness 3.20 mm	@Thickness 0.126 in	
	0.018 cm/cm	0.018 in/in	Parallel; DAM; ASTM D955
	@Thickness 3.20 mm	@Thickness 0.126 in	

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	40.0 MPa	5800 psi	50%RH; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	62.0 MPa	8990 psi	DAM; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Elongation at Break	25 %	25 %	DAM; nominal; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	40 %	40 %	DAM; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	>= 50 %	>= 50 %	50%RH; nominal; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Elongation at Yield	5.5 %	5.5 %	DAM; ISO 527

Mechanical Properties	@Temperature 23.0 °C Metric	@Temperature 73.4 °F English	Comments
	15 %	15 %	50%RH; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Tensile Modulus	1.10 GPa	160 ksi	50%RH; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	2.40 GPa	348 ksi	DAM; ISO 527
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Flexural Modulus	2.27 GPa	329 ksi	DAM; ISO 178
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Izod Impact, Notched (ISO)	10.0 kJ/m ²	4.76 ft-lb/in ²	DAM; ISO 180/1A
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	16.0 kJ/m ²	7.61 ft-lb/in ²	DAM; ISO 180/1A
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	500 µm/m-°C	278 µin/in-°F	DAM; ASTM E 831
	@Temperature -30.0 - 30.0 °C	@Temperature -22.0 - 86.0 °F	
	500 µm/m-°C	278 µin/in-°F	DAM; ASTM E 831
	@Temperature -40.0 - 23.0 °C	@Temperature -40.0 - 73.4 °F	
	500 µm/m-°C	278 µin/in-°F	DAM; ASTM E 831
	@Temperature 23.0 - 55.0 °C	@Temperature 73.4 - 131 °F	
	500 µm/m-°C	278 µin/in-°F	DAM; ASTM E 831
	@Temperature 55.0 - 160 °C	@Temperature 131 - 320 °F	
	500 µm/m-°C	278 µin/in-°F	DAM; ISO 11359-1/-2
	@Temperature -30.0 - 30.0 °C	@Temperature -22.0 - 86.0 °F	
	500 µm/m-°C	278 µin/in-°F	DAM; ISO 11359-1/-2
	@Temperature -40.0 - 23.0 °C	@Temperature -40.0 - 73.4 °F	
	500 µm/m-°C	278 µin/in-°F	DAM; ISO 11359-1/-2
	@Temperature 23.0 -	@Temperature 73.4 -	

Thermal Properties	55.0 °C Metric	131 °F English	Comments
	500 µm/m-°C	278 µin/in-°F	
	@Temperature 55.0 - 160 °C	@Temperature 131 - 320 °F	DAM; ISO 11359-1/-2
CTE, linear, Transverse to Flow	90.0 µm/m-°C	50.0 µin/in-°F	
	@Temperature -30.0 - 30.0 °C	@Temperature -22.0 - 86.0 °F	DAM; ASTM E 831
	90.0 µm/m-°C	50.0 µin/in-°F	
	@Temperature -40.0 - 23.0 °C	@Temperature -40.0 - 73.4 °F	DAM; ASTM E 831
	90.0 µm/m-°C	50.0 µin/in-°F	
	@Temperature -30.0 - 30.0 °C	@Temperature -22.0 - 86.0 °F	DAM; ISO 11359-1/-2
	90.0 µm/m-°C	50.0 µin/in-°F	
	@Temperature -40.0 - 23.0 °C	@Temperature -40.0 - 73.4 °F	DAM; ISO 11359-1/-2
	100 µm/m-°C	55.6 µin/in-°F	
	@Temperature 23.0 - 55.0 °C	@Temperature 73.4 - 131 °F	DAM; ASTM E 831
	100 µm/m-°C	55.6 µin/in-°F	
	@Temperature 23.0 - 55.0 °C	@Temperature 73.4 - 131 °F	DAM; ISO 11359-1/-2
	130 µm/m-°C	72.2 µin/in-°F	
	@Temperature 55.0 - 160 °C	@Temperature 131 - 320 °F	DAM; ASTM E 831
	130 µm/m-°C	72.2 µin/in-°F	
	@Temperature 55.0 - 160 °C	@Temperature 131 - 320 °F	DAM; ISO 11359-1/-2
Melting Point	260 °C	500 °F	10°C/min; DAM; ISO 11357-1/-3
Deflection Temperature at 1.8 MPa (264 psi)	65.0 °C	149 °F	DAM; ISO 75-1/-2

Processing Properties	Metric	English	Comments
Melt Temperature	290 °C	554 °F	DAM; Optimum
	280 - 300 °C	536 - 572 °F	DAM
Mold Temperature	70.0 °C	158 °F	DAM; optimum
	50.0 - 90.0 °C	122 - 194 °F	DAM

Processing Properties	Metric	English	Comments
Drying Temperature	80.0 °C	170 °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
Forms	Pellets	DAM
Generic	PA66	DAM
Material Status	Preliminary Data	DAM
Processing Method	Injection Molding	DAM
Product Category	Toughened Resins	DAM
	Unreinforced Resins	DAM
RoHS Compliance	Contact Manufacturer	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