

BASF Ultramid® B3S BK00464 PA6 (Dry)

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6 , Unreinforced

Material Notes:

Ultramid B3S BK00464 is an easy flowing, pigmented black, finely crystalline injection molding PA6 grade. It conforms to FDA requirements of 21 CFR 177.1500.

Order this product through the following link:

http://www.lookpolymers.com/polymer_BASF-Ultramid-B3S-BK00464-PA6-Dry.php

Physical Properties	Metric	English	Comments
Density	1.13 g/cc	0.0408 lb/in ³	ISO 1183
Water Absorption	9.0 - 10 %	9.0 - 10 %	ISO 62
Moisture Absorption at Equilibrium	2.6 - 3.4 %	2.6 - 3.4 %	23°C/50% R.H.; ISO 62
Viscosity Measurement	145	145	Viscosity Number; ISO 307
Linear Mold Shrinkage	0.0055 cm/cm	0.0055 in/in	
Melt Flow	197.75 g/10 min @Load 5.00 kg, Temperature 275 °C	197.75 g/10 min @Load 11.0 lb, Temperature 527 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	90.0 MPa	13100 psi	50mm/min; ISO 527
Elongation at Yield	4.0 %	4.0 %	50mm/min; ISO 527
Modulus of Elasticity	3.40 GPa	493 ksi	ISO 527
Flexural Modulus	3.00 GPa	435 ksi	ISO 178
Izod Impact, Notched (ISO)	5.00 kJ/m ²	2.38 ft-lb/in ²	ISO 180/A
	5.00 kJ/m ² @Temperature -30.0 °C	2.38 ft-lb/in ² @Temperature -22.0 °F	ISO 180/A
Charpy Impact Unnotched	25.0 J/cm ²	119 ft-lb/in ²	ISO 179/1eU
	20.0 J/cm ² @Temperature -30.0 °C	95.2 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eU
Charpy Impact, Notched	0.400 J/cm ²	1.90 ft-lb/in ²	ISO 179/1eA
	0.300 J/cm ² @Temperature -30.0 °C	1.43 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eA

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	70.0 - 100 $\mu\text{m/m}\cdot^\circ\text{C}$	38.9 - 55.6 $\mu\text{in/in}\cdot^\circ\text{F}$	ISO 11359-1/-2
	@Temperature 23.0 - 80.0 $^\circ\text{C}$	@Temperature 73.4 - 176 $^\circ\text{F}$	
Specific Heat Capacity	1.70 J/g $\cdot^\circ\text{C}$	0.406 BTU/lb $\cdot^\circ\text{F}$	
Thermal Conductivity	0.330 W/m-K	2.29 BTU-in/hr-ft $^2\cdot^\circ\text{F}$	DIN 52612
Melting Point	220 $^\circ\text{C}$	428 $^\circ\text{F}$	DIN 53765
Maximum Service Temperature, Air	87.0 $^\circ\text{C}$	189 $^\circ\text{F}$	for 50% loss of tensile strength after 20,000 hr
	97.0 $^\circ\text{C}$	207 $^\circ\text{F}$	for 50% loss of tensile strength after 5,000 hr
	180 $^\circ\text{C}$	356 $^\circ\text{F}$	
Deflection Temperature at 0.46 MPa (66 psi)	180 $^\circ\text{C}$	356 $^\circ\text{F}$	ISO 75
Deflection Temperature at 1.8 MPa (264 psi)	65.0 $^\circ\text{C}$	149 $^\circ\text{F}$	ISO 75
Flammability, UL94	V-2	V-2	
	@Thickness $\geq$ 1.50 mm	@Thickness $\geq$ 0.0591 in	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+13 ohm-cm	1.00e+13 ohm-cm	IEC 60093
Dielectric Constant	3.3	3.3	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Dissipation Factor	0.030	0.030	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Comparative Tracking Index	600 V	600 V	Test Solution A; IEC 60112

Processing Properties	Metric	English	Comments
Melt Temperature	250 - 270 $^\circ\text{C}$	482 - 518 $^\circ\text{F}$	Injection-molding/Extrusion
Mold Temperature	40.0 - 60.0 $^\circ\text{C}$	104 - 140 $^\circ\text{F}$	Injection-molding

Descriptive Properties	Value	Comments
Color	BK00464	

Descriptive Properties	Value	Comments
Impact Modified	No	
Primary Processing Technique	Injection Molding	

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