

BASF Ultramid® A3HG5 LS BK 23189 25% Glass Filled PA66 (Dry)

Category : Polymer , Thermoplastic , Nylon , Nylon 66 , Nylon 66, 30% Glass Fiber Filled

Material Notes:

Description: 25% glass fiber reinforced injection molding grade for machinery components and housings of high stiffness and dimensional stability such as coil formers and bearing cages. Also used for electrically insulating parts. Information provided by BASF

Order this product through the following link:

http://www.lookpolymers.com/polymer_BASF-Ultramid-A3HG5-LS-BK-23189-25-Glass-Filled-PA66-Dry.php

Physical Properties	Metric	English	Comments
Bulk Density	0.500 - 0.800 g/cc	0.0181 - 0.0289 lb/in ³	
Density	1.32 g/cc	0.0477 lb/in ³	ISO 1183
Water Absorption	5.7 - 6.3 %	5.7 - 6.3 %	ISO 62
Moisture Absorption at Equilibrium	1.7 - 2.1 %	1.7 - 2.1 %	ISO 62
Viscosity Measurement	145	145	ISO 307
Linear Mold Shrinkage	0.0055 cm/cm	0.0055 in/in	
Melt Flow	66 g/10 min @Load 5.00 kg, Temperature 275 °C	66 g/10 min @Load 11.0 lb, Temperature 527 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	170 MPa	24700 psi	ISO 527-1/-2
Elongation at Break	3.0 %	3.0 %	ISO 527-1/-2
Modulus of Elasticity	8.60 GPa	1250 ksi	ISO 527-1/-2
Flexural Strength	260 MPa	37700 psi	ISO 178
Flexural Modulus	7.60 GPa	1100 ksi	ISO 178
Izod Impact, Notched (ISO)	9.50 kJ/m ² @Temperature 23.0 °C	4.52 ft-lb/in ² @Temperature 73.4 °F	ISO 180/1A
Charpy Impact Unnotched	5.50 J/cm ² @Temperature -30.0 °C	26.2 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eU
	6.50 J/cm ² @Temperature 23.0 °C	30.9 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eU
	0.900 J/cm ²	4.28 ft-lb/in ²	

Charpy Impact, Notched Mechanical Properties	Metric @ Temperature -30.0 °C	English @ Temperature -22.0 °F	ISO 179/1eA Comments
	1.20 J/cm ²	5.71 ft-lb/in ²	ISO 179/1eA
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Tensile Creep Modulus, 1000 hours	4300 MPa	624000 psi	ISO 899-1
	@Strain <=0.500 %	@Strain <=0.500 %	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	25.0 - 35.0 μm/m-°C	13.9 - 19.4 μin/in-°F	ISO 11359-1/-2
	@Temperature 23.0 - 80.0 °C	@Temperature 73.4 - 176 °F	
CTE, linear, Transverse to Flow	60.0 - 70.0 μm/m-°C	33.3 - 38.9 μin/in-°F	ISO 11359-1/-2
	@Temperature 23.0 - 80.0 °C	@Temperature 73.4 - 176 °F	
Thermal Conductivity	0.340 W/m-K	2.36 BTU-in/hr-ft ² -°F	DIN 52612-1
Melting Point	260 °C	500 °F	ISO 11357-1/-3
Maximum Service Temperature, Air	140 °C	284 °F	for 50% loss of tensile strength after 5000hr
	170 °C	338 °F	for 50% loss of tensile strength after 20000hr
	240 °C	464 °F	
Deflection Temperature at 0.46 MPa (66 psi)	250 °C	482 °F	ISO 527-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	245 °C	473 °F	ISO 527-1/-2
Decomposition Temperature	>= 310 °C	>= 590 °F	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+13 ohm-cm	1.00e+13 ohm-cm	IEC 60093
Dielectric Constant	3.5	3.5	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Dissipation Factor	0.014	0.014	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Comparative Tracking Index	550 V	550 V	Test Solution A; IEC 60112

Processing Properties	Metric	English	Comments
Melt Temperature	280 - 300 °C	536 - 572 °F	Injection Molding/Extrusion
Mold Temperature	80.0 - 90.0 °C	176 - 194 °F	Injection Molding

Descriptive Properties	Value	Comments
Color	BK 23189	
Commercial Status	Europe	
Ignition Temperature	>400°C	ASTM D1929

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