

BASF Ultramid® A3WG3 15% Glass Filled PA66 (Dry)

Category : Polymer , Thermoplastic , Nylon , Nylon 66 , Nylon 66, 20% Glass Fiber Filled

Material Notes:

Description: 15% Glass-fiber reinforced and heat aging resistant injection-molding grade for machine elements and housings of medium stiffness. For electric insulating parts, preference should be given to the grades A3Eg3 and A3hg3 Information provided by BASF

Order this product through the following link:

http://www.lookpolymers.com/polymer_BASF-Ultramid-A3WG3-15-Glass-Filled-PA66-Dry.php

Physical Properties	Metric	English	Comments
Density	1.23 g/cc	0.0444 lb/in ³	ISO 1183
Water Absorption	6.7 - 7.3 %	6.7 - 7.3 %	Saturation; ISO 62
Moisture Absorption at Equilibrium	1.9 - 2.5 %	1.9 - 2.5 %	23°C; 50% RH; ISO 62
Viscosity Measurement	145	145	ISO 307
Linear Mold Shrinkage	0.0075 cm/cm	0.0075 in/in	restricted
Melt Flow	73.8 g/10 min @Load 5.00 kg, Temperature 275 °C	73.8 g/10 min @Load 11.0 lb, Temperature 527 °F	ISO 1133

Mechanical Properties	Metric	English	Comments
Tensile Strength, Yield	130 MPa	18900 psi	50 mm/min; ISO 527-1/-2
Elongation at Yield	3.0 %	3.0 %	50 mm/min; ISO 527-1/-2
Modulus of Elasticity	6.00 GPa	870 ksi	ISO 527-1/-2
Flexural Strength	200 MPa	29000 psi	at max force; ISO 178
Flexural Modulus	5.50 GPa	798 ksi	ISO 178
Izod Impact, Notched (ISO)	5.50 kJ/m ² @Temperature 23.0 °C	2.62 ft-lb/in ² @Temperature 73.4 °F	ISO 180/A
Charpy Impact Unnotched	4.30 J/cm ² @Temperature -30.0 °C	20.5 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eU
	4.50 J/cm ² @Temperature 23.0 °C	21.4 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eU
Charpy Impact, Notched	0.700 J/cm ² @Temperature -30.0 °C	3.33 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eA

Mechanical Properties	Metric	English	Comments
	0.800 J/cm ²	3.81 ft-lb/in ²	ISO 179/15A
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	30.0 - 35.0 µm/m-°C	16.7 - 19.4 µin/in-°F	DIN 11359-1/-2
	@Temperature 23.0 - 80.0 °C	@Temperature 73.4 - 176 °F	
CTE, linear, Transverse to Flow	70.0 - 80.0 µm/m-°C	38.9 - 44.4 µin/in-°F	DIN 11359-1/-2
	@Temperature 23.0 - 80.0 °C	@Temperature 73.4 - 176 °F	
Specific Heat Capacity	1.80 J/g-°C	0.430 BTU/lb-°F	
Thermal Conductivity	0.330 W/m-K	2.29 BTU-in/hr-ft ² -°F	DIN 52612
Melting Point	260 °C	500 °F	DIN 53765
Maximum Service Temperature, Air	145 °C	293 °F	for 50% loss of tensile strength after 20000hr
	175 °C	347 °F	for 50% loss of tensile strength after 5000hr
	240 °C	464 °F	
Deflection Temperature at 0.46 MPa (66 psi)	250 °C	482 °F	ISO 75-1/-2
Deflection Temperature at 1.8 MPa (264 psi)	240 °C	464 °F	ISO 75-1/-2
Flammability, UL94	HB	HB	
	@Thickness 1.60 mm	@Thickness 0.0630 in	

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 1.00 Hz	@Frequency 1.00 Hz	
Dissipation Factor	0.0014	0.0014	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Comparative Tracking Index	450 V	450 V	Test solution A; IEC 60112

Processing Properties	Metric	English	Comments
Melt Temperature	280 - 300 °C	536 - 572 °F	Injection-molding/Extrusion

Processing Properties	Metric	English	Comments
Mold Temperature	80.0 ~ 90.0 °C	176 ~ 194 °F	Injection-molding

Descriptive Properties	Value	Comments
Commercial Status	Europe	

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