

BASF Ultramid® 8272G HS BK-102 12% Glass Filled PA6 (Dry)

Category : Polymer , Thermoplastic , Nylon , Nylon 6 , Nylon 6, 10% Glass Fiber Filled

Material Notes:

Ultramid 8272G HS BK-102 is a 12% glass fiber reinforced, black pigmented, thermally modified, nylon 6 blow molding compound offering an excellent balance of engineering properties combined with the melt strength ideally suited for blow molding and other applications requiring ultra high melt viscosity. It exhibits improved strength, stiffness and creep resistance compare to standard blow molding grades. Outstanding permeability and chemical resistance to oils, hydrocarbons and most solvents are other advantages along with excellent stiffness and the ability to fabricate complex shapes for cost effective metal replacements.

Order this product through the following link:

http://www.lookpolymers.com/polymer_BASF-Ultramid-8272G-HS-BK-102-12-Glass-Filled-PA6-Dry.php

Physical Properties	Metric	English	Comments
Density	1.22 g/cc	0.0441 lb/in ³	ISO 1183
Water Absorption	1.4 %	1.4 %	24 hour; ISO Test
	8.3 %	8.3 %	ISO 62
Moisture Absorption at Equilibrium	2.3 %	2.3 %	23°C/50% R.H.; ISO 62
Linear Mold Shrinkage	0.0030 cm/cm	0.0030 in/in	ASTM Data; MD

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	121	121	ASTM Test
Tensile Strength at Break	110 MPa	16000 psi	0.2 in/min; ASTM Test
	45.0 MPa	6530 psi	ISO Data
	@Temperature 120 °C	@Temperature 248 °F	
	45.0 MPa	6530 psi	ASTM Test
	@Temperature 120 °C	@Temperature 248 °F	
	115 MPa	16700 psi	ASTM Test
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	115 MPa	16700 psi	ISO Data
	@Temperature -40.0 °C	@Temperature -40.0 °F	
Tensile Strength, Ultimate	110 MPa	16000 psi	5mm/min; ISO 527
Elongation at Break	3.0 %	3.0 %	0.2 in/min; ASTM Test
	3.0 %	3.0 %	5mm/min; ISO 527

Mechanical Properties	2.0 % Metric	2.0 % English	Comments
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	2.0 %	2.0 %	ASTM Test
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	15 %	15 %	ASTM Test
	@Temperature 120 °C	@Temperature 248 °F	
	15 %	15 %	ISO Data
	@Temperature 120 °C	@Temperature 248 °F	
Tensile Modulus	5.22 GPa	757 ksi	1mm/min; ISO 527
	1.445 GPa	209.6 ksi	ISO Data
	@Temperature 120 °C	@Temperature 248 °F	
	2.10 GPa	305 ksi	ISO Data
	@Temperature 80.0 °C	@Temperature 176 °F	
	6.37 GPa	924 ksi	ISO Data
	@Temperature -40.0 °C	@Temperature -40.0 °F	
Flexural Strength	165 MPa	23900 psi	ASTM Test
	50.0 MPa	7250 psi	ASTM Test
	@Temperature 120 °C	@Temperature 248 °F	
	200 MPa	29000 psi	ASTM Test
	@Temperature -40.0 °C	@Temperature -40.0 °F	
Flexural Modulus	4.30 GPa	624 ksi	ISO Data
	4.65 GPa	674 ksi	ASTM Test
	0.995 GPa	144 ksi	ASTM Test
	@Temperature 120 °C	@Temperature 248 °F	
Izod Impact, Notched	0.400 J/cm	0.749 ft-lb/in	ASTM Test
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	0.450 J/cm	0.843 ft-lb/in	ASTM Test
	@Thickness 3.17 mm	@Thickness 0.125 in	
Izod Impact, Notched (ISO)	5.90 kJ/m²	2.81 ft-lb/in²	ISO Test
Charpy Impact, Notched	0.710 J/cm²	3.38 ft-lb/in²	ISO 179

Thermal Properties	Metric	English	Comments
CTE, linear	97.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	53.9 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	ASTM Test
	@Temperature -30.0 - 30.0 $^\circ\text{C}$	@Temperature -22.0 - 86.0 $^\circ\text{F}$	
CTE, linear, Parallel to Flow	28.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	15.6 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	ISO 11359
CTE, linear, Transverse to Flow	72.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	40.0 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	ISO 11359
Melting Point	220 $^\circ\text{C}$	428 $^\circ\text{F}$	10 K/min
	220 $^\circ\text{C}$	428 $^\circ\text{F}$	ASTM Test
Deflection Temperature at 0.46 MPa (66 psi)	210 $^\circ\text{C}$	410 $^\circ\text{F}$	ISO 75
Deflection Temperature at 1.8 MPa (264 psi)	170 $^\circ\text{C}$	338 $^\circ\text{F}$	ISO 75
	197 $^\circ\text{C}$	387 $^\circ\text{F}$	ASTM Test

Electrical Properties	Metric	English	Comments
Volume Resistivity	$\geq 1.00\text{e}+13$ ohm-cm	$\geq 1.00\text{e}+13$ ohm-cm	IEC 60093

Processing Properties	Metric	English	Comments
Melt Temperature	275 $^\circ\text{C}$	527 $^\circ\text{F}$	Injection molding
Mold Temperature	95.0 $^\circ\text{C}$	203 $^\circ\text{F}$	Injection molding

Descriptive Properties	Value	Comments
Color	BK-102	
Commercial Status	Active America	
Form	Pellets	
Impact Modified	No	
Primary Processing Technique	Blow Molding	
Processing	Blow molding	
	Injection Molding	
Special characteristic	Heat stabilized or stable to heat	

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