Toyobo GLAMIDE® NB-1700 Nylon/Olefin

Category : Polymer , Thermoplastic , Nylon

Material Notes:

GLAMIDE® is very tough and exhibits high abrasion resistance. It has a high melting point and heat resistance, has well-balanced proportions of mechanical properties, performs self-distinguishing and a specific grade approved as UL94V-0 class is provided, and it exhibits excellent chemical resistance and oil resistance. Grade NB-1700 is a non-reinforced alloy of nylon and olefin. It is light weight and has low water absorption.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Toyobo-GLAMIDE-NB-1700-NylonOlefin.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.06 g/cc	1.06 g/cc	Absolute Drying; ASTM-D792
Water Absorption	1.1 %	1.1 %	Absolute Drying; ASTM-D570
Moisture Absorption at Equilibrium	2.4 %	2.4 %	Absolute Drying; ASTM-D570
Linear Mold Shrinkage	0.0070 - 0.010 cm/cm @Thickness 1.00 mm	0.0070 - 0.010 in/in @Thickness 0.0394 in	Absolute Drying
	0.014 - 0.018 cm/cm @Thickness 3.00 mm	0.014 - 0.018 in/in @Thickness 0.118 in	Absolute Drying
Melt Flow	25 - 30 g/10 min	25 - 30 g/10 min	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	118	118	Absolute Drying; ASTM-D785
Tensile Strength, Ultimate	11.0 MPa @Temperature 80.0 °C	1600 psi @Temperature 176 °F	Practical Use (Water Absorption 2.4%); ASTM-D638
	14.0 MPa @Temperature 80.0 °C	2030 psi @Temperature 176 °F	Absolute Drying; ASTM-D638
	34.0 MPa @Temperature 23.0 °C	4930 psi @Temperature 73.4 °F	Practical Use (Water Absorption 2.4%); ASTM-D638
	55.0 MPa @Temperature 23.0 °C	7980 psi @Temperature 73.4 °F	Absolute Drying; ASTM-D638
	90.0 MPa @Temperature -40.0 °C	13100 psi @Temperature -40.0 °F	Practical Use (Water Absorption 2.4%); ASTM-D638
	95.0 MPa	13800 psi	

Mechanical Properties	Metric	English	Comments
	@Temperature -40.0 °C	@Temperature -40.0 °F	Absolute Drying; ASTM-D638
Elongation at Break	>= 100 %	>= 100 %	Absolute Drying; ASTM-D638
	>= 200 %	>= 200 %	Practical Use (Water Absorption 2.4%); ASTM-D638
Flexural Strength	15.0 MPa @Temperature 80.0 °C	2180 psi @Temperature 176 °F	Practical Use (Water Absorption 2.4%); ASTM-D790
	19.0 MPa @Temperature 80.0 °C	2760 psi @Temperature 176 °F	Absolute Drying; ASTM-D790
	48.0 MPa @Temperature 23.0 °C	6960 psi @Temperature 73.4 °F	Practical Use (Water Absorption 2.4%); ASTM-D790
	77.0 MPa @Temperature 23.0 °C	11200 psi @Temperature 73.4 °F	Absolute Drying; ASTM-D790
	125 MPa @Temperature -40.0 °C	18100 psi @Temperature -40.0 °F	Practical Use (Water Absorption 2.4%); ASTM-D790
	130 MPa @Temperature -40.0 °C	18900 psi @Temperature -40.0 °F	Absolute Drying; ASTM-D790
Flexural Modulus	0.300 GPa @Temperature 80.0 °C	43.5 ksi @Temperature 176 °F	Practical Use (Water Absorption 2.4%); ASTM-D790
	0.700 GPa @Temperature 80.0 °C	102 ksi @Temperature 176 °F	Absolute Drying; ASTM-D790
	0.900 GPa @Temperature 23.0 °C	131 ksi @Temperature 73.4 °F	Practical Use (Water Absorption 2.4%); ASTM-D790
	2.20 GPa @Temperature 23.0 °C	319 ksi @Temperature 73.4 °F	Absolute Drying; ASTM-D790
	3.10 GPa @Temperature -40.0 °C	450 ksi @Temperature -40.0 °F	Practical Use (Water Absorption 2.4%); ASTM-D790
	3.50 GPa @Temperature -40.0 °C	508 ksi @Temperature -40.0 °F	Absolute Drying; ASTM-D790
Izod Impact, Notched	0.400 J/cm @Temperature -40.0 °C	0.749 ft-lb/in @Temperature -40.0 °F	Absolute Drying; ASTM-D256
	0.600 J/cm	1.12 ft-lb/in	Practical Use (Water Absorption

Mechanical Properties	Metric	English	Comments
	@Temperature -40.0 °C	@Temperature -40.0 °F	2.4%); ASTM-D256
	1.05 J/cm @Temperature 23.0 °C	1.97 ft-lb/in @Temperature 73.4 °F	Absolute Drying; ASTM-D256
	4.50 J/cm @Temperature 23.0 °C	8.43 ft-lb/in @Temperature 73.4 °F	Practical Use (Water Absorption 2.4%); ASTM-D256

Thermal Properties	Metric	English	Comments
Deflection Temperature at 0.46 MPa (66 psi)	145 °C	293 °F	Absolute Drying; ASTM-D648
Deflection Temperature at 1.8 MPa (264 psi)	61.0 °C	142 °F	Absolute Drying; ASTM-D648
Flammability, UL94	HB	HB	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+11 ohm-cm	1.00e+11 ohm-cm	Practical Use (Water Absorption 2.4%); ASTM-D257
	1.00e+12 ohm-cm	1.00e+12 ohm-cm	Absolute Drying; ASTM-D257
Dielectric Strength	14.0 kV/mm @Thickness 2.00 mm	356 kV/in @Thickness 0.0787 in	Practical Use (Water Absorption 2.4%); ASTM-D149
	18.0 kV/mm @Thickness 2.00 mm	457 kV/in @Thickness 0.0787 in	Absolute Drying; ASTM-D149
Arc Resistance	110 sec	110 sec	Practical Use (Water Absorption 2.4%); ASTM-D495
	125 sec	125 sec	Absolute Drying; ASTM-D495
Comparative Tracking Index	>= 600 V	>= 600 V	IEC Method

Processing Properties	Metric	English	Comments
Melt Temperature	245 - 285 °C	473 - 545 °F	
Mold Temperature	30.0 - 80.0 °C	86.0 - 176 °F	
Injection Pressure	30.0 - 60.0 MPa	4350 - 8700 psi	

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