

Toyobo GLAMIDE® T-714E Transparent Nylon

Category : Polymer , Thermoplastic , Nylon , Nylon, Aromatic

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 T-714E is a non-reinforced, non-spherulite, aromatic, and transparent nylon.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Toyobo-GLAMIDE-T-714E-Transparent-Nylon.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.18 g/cc	1.18 g/cc	Absolute Drying; ASTM-D792
Water Absorption	1.3 %	1.3 %	Absolute Drying; ASTM-D570
Moisture Absorption at Equilibrium	2.4 %	2.4 %	Absolute Drying; ASTM-D570
Linear Mold Shrinkage	0.0010 - 0.0030 cm/cm	0.0010 - 0.0030 in/in	Absolute Drying
	@Thickness 1.00 mm	@Thickness 0.0394 in	
	0.0040 - 0.0070 cm/cm	0.0040 - 0.0070 in/in	Absolute Drying
	@Thickness 3.00 mm	@Thickness 0.118 in	

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	120	120	Absolute Drying; ASTM-D785
Tensile Strength, Ultimate	16.0 MPa	2320 psi	Practical Use (Water Absorption 2.4%); ASTM-D638
	@Temperature 80.0 °C	@Temperature 176 °F	
	80.0 MPa	11600 psi	Absolute Drying; ASTM-D638
	@Temperature 80.0 °C	@Temperature 176 °F	
	92.0 MPa	13300 psi	Practical Use (Water Absorption 2.4%); ASTM-D638
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	97.0 MPa	14100 psi	Absolute Drying; ASTM-D638
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	125 MPa	18100 psi	Practical Use (Water Absorption 2.4%); ASTM-D638
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	130 MPa	18900 psi	Absolute Drying; ASTM-D638
	@Temperature -40.0 °C	@Temperature -40.0 °F	

Mechanical Properties	Metric	English	Comments
Flexural Strength	25.0 MPa	3630 psi	Practical Use (Water Absorption 2.4%); ASTM-D790
	@Temperature 80.0 °C	@Temperature 176 °F	
	121 MPa	17500 psi	Absolute Drying; ASTM-D790
	@Temperature 80.0 °C	@Temperature 176 °F	
	135 MPa	19600 psi	Practical Use (Water Absorption 2.4%); ASTM-D790
	@Temperature 23.0 °C	@Temperature 73.4 °F	
147 MPa	21300 psi	Absolute Drying; ASTM-D790	
@Temperature 23.0 °C	@Temperature 73.4 °F		
Flexural Modulus	185 MPa	26800 psi	Practical Use (Water Absorption 2.4%); ASTM-D790
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	195 MPa	28300 psi	Absolute Drying; ASTM-D790
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	0.500 GPa	72.5 ksi	Practical Use (Water Absorption 2.4%); ASTM-D790
	@Temperature 80.0 °C	@Temperature 176 °F	
2.00 GPa	290 ksi	Absolute Drying; ASTM-D790	
@Temperature 80.0 °C	@Temperature 176 °F		
2.50 GPa	363 ksi	Practical Use (Water Absorption 2.4%); ASTM-D790	
@Temperature 23.0 °C	@Temperature 73.4 °F		
2.60 GPa	377 ksi	Absolute Drying; ASTM-D790	
@Temperature 23.0 °C	@Temperature 73.4 °F		
Compressive Strength	3.50 GPa	508 ksi	Practical Use (Water Absorption 2.4%); ASTM-D790
	@Temperature -40.0 °C	@Temperature -40.0 °F	
	3.80 GPa	551 ksi	Absolute Drying; ASTM-D790
@Temperature -40.0 °C	@Temperature -40.0 °F		
Izod Impact, Notched	100 MPa	14500 psi	Absolute Drying; ASTM-D695
	0.200 J/cm	0.375 ft-lb/in	ASTM-D256
@Temperature -40.0 °C	@Temperature -40.0 °F		
Izod Impact, Notched	0.600 J/cm	1.12 ft-lb/in	ASTM-D256
	@Temperature 23.0 °C	@Temperature 73.4 °F	

Thermal Properties	Metric	English	Comments
CTE, linear	54.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	30.0 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	Absolute Drying; ASTM-D696
Deflection Temperature at 0.46 MPa (66 psi)	100 $^{\circ}\text{C}$	212 $^{\circ}\text{F}$	Absolute Drying; ASTM-D648
Deflection Temperature at 1.8 MPa (264 psi)	118 $^{\circ}\text{C}$	244 $^{\circ}\text{F}$	Absolute Drying; ASTM-D648
Flammability, UL94	HB	HB	

Optical Properties	Metric	English	Comments
Transmission, Visible	90 %	90 %	transparent; thickness not quantified

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+12 ohm-cm	1.00e+12 ohm-cm	ASTM-D257
Dielectric Constant	4.0 @Frequency 1000 Hz	4.0 @Frequency 1000 Hz	ASTM-D150
Dielectric Strength	19.0 kV/mm @Thickness 2.00 mm	483 kV/in @Thickness 0.0787 in	ASTM-D149
Arc Resistance	110 sec	110 sec	ASTM-D495
Comparative Tracking Index	$\geq 600 \text{ V}$	$\geq 600 \text{ V}$	IEC Method

Processing Properties	Metric	English	Comments
Melt Temperature	250 - 280 $^{\circ}\text{C}$	482 - 536 $^{\circ}\text{F}$	
Mold Temperature	60.0 $^{\circ}\text{C}$	140 $^{\circ}\text{F}$	
Injection Pressure	40.0 - 50.0 MPa	5800 - 7250 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