

Lubrizol Advanced Materials PEARLTHANE® Clear 15N80 Thermoplastic Polyurethane Elastomer

Category : Polymer , Thermoplastic , Polyurethane, TP , Thermoplastic Polyurethane (TPUR), Polyester Grade

Material Notes:

PEARLTHANE® CLEAR 15N80 is a polyether copolymer-based TPU, supplied in form of translucent, colorless, combining low hardness with excellent mechanical properties and excellent hydrolysis resistance. It can be extruded and injection-molded. All information provided by Merquinsa

Order this product through the following link:

http://www.lookpolymers.com/polymer_Lubrizol-Advanced-Materials-PEARLTHANE-Clear-15N80-Thermoplastic-Polyurethane-Elastomer.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.05 g/cc	1.05 g/cc	ASTM D792
Melt Flow	10 g/10 min @Load 21.6 kg	10 g/10 min @Load 47.6 lb	

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	82	82	ASTM D2240
Tensile Strength, Yield	35.00 MPa	5076 psi	ASTM D412
Elongation at Break	740 %	740 %	ASTM D412
100% Modulus	0.00500 GPa	0.725 ksi	ASTM D412
300% Modulus	0.00800 GPa	1.16 ksi	ASTM D412
Tear Strength	80.6 kN/m	460 pli	ASTM D624 (Die C)
Abrasion	25	25	loss (mm ³); DIN 53.516
Compression Set	24 % @Temperature 22.8 °C, Time 252000 sec	24 % @Temperature 73.0 °F, Time 70.0 hour	ASTM D395
	38 % @Temperature 70.0 °C, Time 86400 sec	38 % @Temperature 158 °F, Time 24.0 hour	ASTM D395

Thermal Properties	Metric	English	Comments
Melting Point	196 - 204 °C	385 - 400 °F	MQSA 111

Glass Transition Temp, Tg Thermal Properties	-53.9 Â°C Metric	-65.0 Â°F English	DSC, 10Â°C/min; DIN 51.007 Comments
Optical Properties	Metric	English	Comments
Transmission, Visible	90 %	90 %	clear; thickness not quantified
Processing Properties	Metric	English	Comments
Feed Temperature	185 Â°C	365 Â°F	
Nozzle Temperature	199 Â°C	390 Â°F	
Zone 1	191 Â°C	375 Â°F	Compression Zone
Zone 2	196 Â°C	385 Â°F	Metering Zone
Mold Temperature	35.0 Â°C	95.0 Â°F	
Moisture Content	<= 0.10 %	<= 0.10 %	MQSA 44
Injection Pressure	10.0 MPa	1450 psi	
Hold Pressure	4.83 MPa @Time 10.0 sec	700 psi @Time 0.00278 hour	
Cycle Time - Injection	4.0 sec	4.0 sec	
Cycle Time - Cooling	30 sec	30 sec	
Screw Speed	142 rpm	142 rpm	

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