

Pearlthane® D16N98UV

Thermoplastic Polyurethane Elastomer (Polyether)

Lubrizol Advanced Materials, Inc.

Message:

Pearlthane® D16N98UV is a polyether-based TPU, supplied in form of transparent, colourless pellets, combining high hardness with excellent mechanical properties and good hydrolysis and microbial resistance. Pearlthane® D16N98UV is especially designed for extrusion processes. Pearlthane® D16N98UV is especially designed for extrusion of tubes (e.g. pneumatic tubing) and profiles where excellent mechanical properties at low temperature, hydrolysis and microbe resistance are required.

General Information			
Additive	UV stabilizer		
Features	Antimicrobial		
	Low temperature resistance		
	Hydrolysis resistance		
	High hardness		
	UV absorption		
Uses	Engineering accessories		
	Pipe fittings		
	Profile		
Appearance	Translucent		
	Colorless		
Forms	Particle		
Processing Method	Extrusion		
Physical	Nominal Value	Unit	Test Method
Specific Gravity			
-- ¹	1.10	g/cm ³	ASTM D792
20°C	1.10	g/cm ³	ISO 2781
Moisture Content		%	Internal method
Abrasion Loss	30.0	mm ³	ISO 4649
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240, ISO 868
Shaw A	95		ASTM D2240, ISO 868
Shaw D	48		ASTM D2240, ISO 868
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ASTM D412, ISO 527
100% strain	12.0	MPa	ASTM D412, ISO 527
300% strain	24.0	MPa	ASTM D412, ISO 527
Tensile Strength (Yield)	31.0	MPa	ASTM D412, ISO 527

Tensile Elongation (Break)	380	%	ASTM D412, ISO 527
Tear Strength			
-- ²	140	kN/m	ASTM D624
-- ³	140	kN/m	ISO 34-1
Thermal	Nominal Value	Unit	Test Method
Glass Transition Temperature ⁴	-48.0	°C	ISO 11357-2
Melting Temperature ⁵	188 - 198	°C	Internal method
Extrusion	Nominal Value	Unit	
Drying Temperature	100 - 110	°C	
Drying Time	2.0	hr	
Cylinder Zone 1 Temp.	195 - 210	°C	
Cylinder Zone 2 Temp.	205 - 215	°C	
Cylinder Zone 3 Temp.	215 - 225	°C	
Cylinder Zone 4 Temp.	210 - 220	°C	
Die Temperature	195 - 210	°C	
Extrusion instructions			
Type: 30/25d (l/d = 25:1), Cooling: Air, Screw: 3:1, Speed: 50 rpm, Thickness Die: 0,2 mm, Pre-heating: 1h @ 100 °C (212 °F).			
NOTE			
1.	@ 20°C		
2.	C mould		
3.	Method B		
4.	10°C/min		
5.	Temperature at which MFI = 10 g/10 min @ 21.6 kg		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT