

Technical Information



APILON™ 52 BIO T L 72

Overview

Bio-based Ether Polyurethane

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.18 g/cm ³	1.18 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (210°C/5.0 kg)	40 g/10 min	40 g/10 min	ASTM D1238
Biobased Carbon Content	45 %	45 %	ASTM D6866B
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹			ASTM D638
Break	6960 psi	48.0 MPa	
100% Strain	4350 psi	30.0 MPa	
300% Strain	5080 psi	35.0 MPa	
Tensile Elongation ¹ (Break)	350 %	350 %	ASTM D638
Flexural Modulus (73°F (23°C))	94300 psi	650 MPa	ASTM D790
Abrasion Resistance - (Method A)	50.0 mm ³	50.0 mm ³	ISO 4649
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	4.0 ft-lb/in	220 J/m	ASTM D256A
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore D, 3 sec)	72	72	ASTM D2240
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating			UL 94
0.028 in (0.70 mm)	V-2	V-2	
0.12 in (3.0 mm)	V-2	V-2	
Additional Information	Nominal Value (English)	Nominal Value (SI)	
Shelf Life ²	12 month	12 month	
Injection	Nominal Value (English)	Nominal Value (SI)	
Drying Temperature	194 to 212 °F	90 to 100 °C	
Drying Time	> 2.0 hr	> 2.0 hr	
Rear Temperature	383 to 419 °F	195 to 215 °C	
Middle Temperature	392 to 428 °F	200 to 220 °C	
Front Temperature	392 to 428 °F	200 to 220 °C	
Nozzle Temperature	401 to 437 °F	205 to 225 °C	
Mold Temperature	104 to 140 °F	40 to 60 °C	

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

¹ Type IV, 7.9 in/min (200 mm/min)

² Opened packaging should be sealed after use.

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