

Technical Information



APILON™ 52 BIO T L 25

Overview

Bio-based Ether Polyurethane

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.13 g/cm ³	1.13 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	54 %	54 %	ASTM D6866B
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength ¹			ASTM D638
Break	6530 psi	45.0 MPa	
100% Strain	725 psi	5.00 MPa	
300% Strain	1310 psi	9.00 MPa	
Tensile Elongation ¹ (Break)	700 %	700 %	ASTM D638
Abrasion Resistance - (Method A)	50.0 mm ³	50.0 mm ³	ISO 4649
Elastomers	Nominal Value (English)	Nominal Value (SI)	Test Method
Tear Strength ² (Peak)	485 lbf/in	85.0 kN/m	ASTM D624
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Durometer Hardness (Shore A, 15 sec)	84	84	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	
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Haze (0.118 mil (3.0 µm))	3.00 %	3.00 %	ASTM D1003A
Additional Information	Nominal Value (English)	Nominal Value (SI)	
Shelf Life ³	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	347 to 365 °F	175 to 185 °C	
Middle Temperature	356 to 374 °F	180 to 190 °C	
Front Temperature	365 to 383 °F	185 to 195 °C	
Nozzle Temperature	356 to 392 °F	180 to 200 °C	
Mold Temperature	86 to 122 °F	30 to 50 °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 Die C

³ Opened packaging should be sealed after use.

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