apilon 52® D-50L

Thermoplastic Polyurethane Elastomer (Polyester)

API SpA

Message:

apilon 52® D-50L is a thermoplastic polyurethane elastomer (polyester) (TPU-polyester) product. It can be processed by injection molding and is available in Europe. apilon 52® D-50L application areas include engineering/industrial accessories, electrical/electronic applications, electrical appliances, tools and home applications.

Features include: environmental protection/green Good processability Rapid Prototyping Cycle Good UV resistance low temperature resistance

Recyclable materials Workability, good Fast molding cycle Low temperature resistance Hydrolysis resistance Uses Handle Wheels Conveyor belt repair Electrical/Electronic Applications Electrical appliances Washer Power/other tools Pipe fittings Household goods Sporting goods Coating application Footwear Processing Method Injection molding Physical Nominal Value Unit Test Method Specific Gravity 1.21 g/cm³ ASTM D792 Hardness Nominal Value Unit Test Method Durometer Hardness Shaw A, 15 seconds 98 ASTM D2240 Shaw D, 3 seconds	General Information					
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	Mechanical	Nominal Value	Unit	Test Method		

Tensile Strength			ASTM D638
	35.0	MPa	ASTM D638
100% strain	9.00	MPa	ASTM D638
300% strain	18.0	MPa	ASTM D638
Tensile Elongation (Break)	600	%	ASTM D638
Flexural Modulus (23°C)	105	MPa	ASTM D790
Abrasion Resistance	30.0	mm³	DIN 53516
Elastomers	Nominal Value	Unit	Test Method
Tear Strength ¹	110	kN/m	ASTM D624
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (-20°C)	No Break		ASTM D256
Injection	Nominal Value	Unit	
Drying Temperature	80 - 100	°C	
Drying Time	2.0	hr	
Suggested Max Moisture	0.070	%	
Rear Temperature	180 - 190	°C	
Middle Temperature	185 - 200	°C	
Front Temperature	190 - 215	°C	
Nozzle Temperature	200 - 230	°C	
Mold Temperature	30 - 60	°C	
Injection Pressure	50.0 - 100	MPa	
Injection Rate	Slow-Moderate		
NOTE			
1.	With Notch		

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