apilon 52® 5011

Thermoplastic Polyurethane Elastomer (Polyester)

API SpA

Message:

Hardness

apilon 52® 5011 is a thermoplastic polyurethane elastomer (polyester)(TPU-polyester) product. It can be processed by extrusion or injection molding and is available in Europe. apilon 52® 5011 application areas include engineering/industrial accessories, electrical/electronic applications, electrical appliances, tools and home applications. Features include: environmental protection/green Good processability low temperature resistance chemical resistance Wear-resistant

General Information								
Features	Low density Recyclable materials Workability, good Good wear resistance Low temperature resistance Oil resistance							
	Soft							
Uses	Handle							
	Wheels							
	Conveyor belt repair Electrical/Electronic Applications Electrical appliances Washer Power/other tools Pipe fittings							
					Household goods			
					Sporting goods			
					Coating application			
					Footwear			
	Forms	Particle						
	Processing Method	Extrusion						
		Injection molding						
Physical	Nominal Value	Unit	Test Method					
Specific Gravity	1.03	g/cm³	ASTM D792					

Nominal Value

Unit

Test Method

Durometer Hardness (Shore D, 3 sec)	53		ASTM D2240		
Mechanical	Nominal Value	Unit	Test Method		
Tensile Strength			ASTM D638		
	10.0	MPa	ASTM D638		
100% strain	1.60	MPa	ASTM D638		
300% strain	3.00	MPa	ASTM D638		
Tensile Elongation (Break)	600	%	ASTM D638		
Abrasion Resistance	120	mm³	DIN 53516		
Elastomers	Nominal Value	Unit	Test Method		
Tear Strength ¹	27.0	kN/m	ASTM D624		
Injection	Nominal Value	Unit			
Drying Temperature	80.0 - 110	°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	30.0 - 60.0	°C			
Injection Pressure	50.0 - 100	MPa			
Injection Rate	Slow-Moderate				
Injection instructions					
Back Pressure: Medium to LowLocking Pressure: High					
Extrusion	Nominal Value	Unit			
Drying Temperature	80.0 - 110	°C			
Drying Time	2.0	hr			
Suggested Max Moisture	0.070	%			
Cylinder Zone 1 Temp.	160 - 185	°C			
Cylinder Zone 2 Temp.	170 - 200	°C			
Cylinder Zone 3 Temp.	175 - 210	°C			
Cylinder Zone 4 Temp.	180 - 220	°C			
Die Temperature	170 - 210	°C			
Extrusion instructions					
L/D Ratio: 20:1 to 30:1Compression Ratio:	1:2.5 to 1:3				
NOTE					
1.	Without Notch				

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.

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

