apilon 52® TCLE 25 AF

Thermoplastic Polyurethane Elastomer (Polyether)

API SpA

Message:

apilon 52®TCLE 25 AF is a thermoplastic polyurethane elastomer (polyether)(TPU-polyether) product. It can be processed by extrusion or injection molding and is available in Europe. apilon 52®TCLE 25 AF applications include engineering/industrial accessories, electrical/electronic applications, electrical appliances, tools and home applications. Features include: flame retardant/rated flame high liquidity environmental protection/green low temperature resistance

chemical resistance

Hardness

General Information									
Features	Antimicrobial Recyclable materials Good wear resistance High liquidity Low temperature resistance Hydrolysis resistance								
	Oil 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				
					Forms	Particle			
	Processing Method	Extrusion							
		Injection molding							
Physical	Nominal Value	Unit	Test Method						
Specific Gravity	1.14	g/cm³	ASTM D792						

Unit

Test Method

Nominal Value

Durometer Hardness (Shore A, 15 sec)	78		ASTM D2240
Mechanical	Nominal Value	Unit	Test Method
Tensile Strength			ASTM D638
	22.0	MPa	ASTM D638
100% strain	3.50	MPa	ASTM D638
300% strain	6.00	MPa	ASTM D638
Tensile Elongation (Break)	600	%	ASTM D638
Abrasion Resistance	50.0	mm³	DIN 53516
Elastomers	Nominal Value	Unit	Test Method
Tear Strength ¹	55.0	kN/m	ASTM D624
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (-20°C)	No Break		ASTM D256
Flammability	Nominal Value		Test Method
Flame Rating	V-2		UL 94
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 Ra	atio: 1:2.5 to 1:3		
NOTE			
1.	Without Notch		

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Recommended distributors for this material

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