



Sarlink® TPV 24972B

Teknor Apex Company - Thermoplastic Vulcanizate

General Information

Product Description

Sarlink TPV 24971B is a high performance thermoplastic vulcanizate used in automotive and industrial applications. Sarlink TPV 24971B is a medium hardness, low density grade exhibiting that can be processed by injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Filled • Good Mold Release • Good Moldability • Good Processability	• Light Stabilized • Low Density • Low Flow • Low Specific Gravity	• Low Viscosity • Lubricated • Medium Hardness • Slip
Uses	• Expansion Joint • Gaskets • Glazing	• Grommets • Plugs • Shock Absorbing Pads	• Tubing • Weatherstripping
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.930	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	7.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ISO 37
Across Flow : 100% Strain	295	psi	
Flow : 100% Strain	559	psi	
Tensile Stress ²			ISO 37
Across Flow : Break	558	psi	
Flow : Break	650	psi	
Tensile Elongation ²			ISO 37
Across Flow : Break	340	%	
Flow : Break	190	%	
Tear Strength ³			ISO 34-1
Across Flow	107	lbf/in	
Flow	99.4	lbf/in	
Compression Set ⁴			ISO 815
73°F, 22 hr	20	%	
158°F, 22 hr	29	%	
194°F, 70 hr	31	%	
257°F, 70 hr	48	%	
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 868
Shore A, 1 sec, Injection Molded	71		
Shore A, 5 sec, Injection Molded	68		
Shore A, 15 sec, Injection Molded	67		

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Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air ⁵			ISO 188
Across Flow : 230°F, 1008 hr	2.9	%	
Flow : 230°F, 1008 hr	-3.3	%	
Across Flow : 100% Strain 230°F, 1008 hr	9.9	%	
Flow : 100% Strain 230°F, 1008 hr	1.0	%	
Across Flow : 257°F, 168 hr	5.5	%	
Flow : 257°F, 168 hr	-4.0	%	
Across Flow : 100% Strain 257°F, 168 hr	10	%	
Flow : 100% Strain 257°F, 168 hr	5.2	%	
Change in Tensile Strain at Break in Air ⁵			ISO 188
Across Flow : 230°F, 1008 hr	-6.1	%	
Flow : 230°F, 1008 hr	-18	%	
Across Flow : 257°F, 168 hr	-7.0	%	
Flow : 257°F, 168 hr	-24	%	
Change in Shore Hardness in Air			ISO 188
Shore A, 230°F, 1008 hr ⁶	-0.10		
Shore A, 230°F, 1008 hr ⁷	-0.10		
Shore A, 230°F, 1008 hr ⁸	0.10		
Shore A, 257°F, 168 hr	0.30		
Shore A, 257°F, 168 hr ⁷	0.60		
Shore A, 257°F, 168 hr ⁸	0.90		
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity			ASTM D257
73°F	2.9E+16	ohms·cm	
122°F	3.8E+14	ohms·cm	
Fill Analysis	Nominal Value	Unit	Test Method
Apparent Viscosity (392°F, 206 sec ⁻¹)	179	Pa·s	ASTM D3835

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	344 to 416	°F
Middle Temperature	354 to 426	°F
Front Temperature	364 to 436	°F
Nozzle Temperature	374 to 446	°F
Processing (Melt) Temp	374 to 446	°F
Mold Temperature	60 to 90	°F
Injection Pressure	200 to 1000	psi
Injection Rate	Fast	
Back Pressure	25.0 to 125	psi
Screw Speed	50 to 120	rpm

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Injection	Nominal Value	Unit
Cushion	0.150 to 1.00	in
Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	330 to 400	°F
Cylinder Zone 2 Temp.	340 to 410	°F
Cylinder Zone 3 Temp.	350 to 420	°F
Cylinder Zone 5 Temp.	360 to 430	°F
Die Temperature	374 to 440	°F
Extrusion Notes		
Screw Speed: 30 to 100 rpm		

Notes

¹ Typical properties: these are not to be construed as specifications.

² Type 1, 20 in/min

³ Method Ba, Angle (Unnicked), 20 in/min

⁴ Type A

⁵ Type 1

⁶ 1 sec

⁷ 5 sec

⁸ 15 sec