



Sarlink® TPV 5765B

Teknor Apex Company - Thermoplastic Vulcanizate

General Information

Product Description

The Sarlink TPV 5700B series are highly engineered extrusion-grade thermoplastic vulcanizates with outstanding UV stability designed for demanding automotive interior and exterior sealing applications, including glass run channels, waistbelts, weather strips, seals and other profiles. Sarlink TPV 5765B is a medium hardness, medium density, high performance grade with low fogging and excellent color retention and elastic properties.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific • Europe	• Latin America • North America	
Features	• Chemical Resistant • Good Processability • High Heat Resistance	• High Melt Stability • High Tensile Strength • Medium Density	• Medium Hardness • Resilient • UV Resistant
Uses	• Automotive Applications • Profiles	• Rubber Replacement • Seals	• Weatherstripping
Agency Ratings	• UL 94		
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• BMW Mini/BMW Unspecified Color: Black • BMW Unspecified Color: Black • FORD WSS-M2D379-B1 • GM GMP.E/P.029 • GM GMW15812P-TPV(EPDM +PP) Type 5E Color: Black • GM GMW15812P-TPV(EPDM +PP) Type 5M Color: Black	• GM QK 003521 L Color: Black • HONDA Unspecified Color: Black • MERCEDES BENZ DBL 5562.30 Color: Black • NISSAN NES M7075 Color: Black • RENAULT F.R.M. 7A-10-A11 Color: Black • STELLANTIS B62 0300 Color: Black	• STELLANTIS MS-AR-100 BGV Color: Black • TOYOTA TSM 1707G-7 Color: Black • TOYOTA TSM 5746G-3 Color: Black • VAG VW501 23 Color: Black • VOLVO STD 318-06010 Color: Black
UL File Number	• QMFZ2.E54709		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Blow Molding	• Extrusion	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.970		ASTM D792
Density	0.970	g/cm ³	ISO 1183
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ASTM D412
Across Flow : 100% Strain	392	psi	
Flow : 100% Strain	609	psi	
Tensile Stress			ISO 37
Across Flow : 100% Strain	392	psi	
Flow : 100% Strain	609	psi	
Tensile Strength			ASTM D412
Across Flow : Break	1030	psi	
Flow : Break	914	psi	

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Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ISO 37
Break	1030	psi	
Flow : Break	914	psi	
Tensile Elongation			ASTM D412
Across Flow : Break	570	%	
Flow : Break	320	%	
Tensile Elongation			ISO 37
Across Flow : Break	570	%	
Flow : Break	320	%	
Tear Strength - Across Flow	170	lbf/in	ASTM D624
Tear Strength - Across Flow ²	166	lbf/in	ISO 34-1
Compression Set			ASTM D395
73°F, 22 hr	21	%	
158°F, 22 hr	30	%	
257°F, 70 hr	44	%	
Compression Set			ISO 815
73°F, 22 hr	21	%	
158°F, 22 hr	30	%	
257°F, 70 hr	44	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 5 sec, Extruded	65		
Shore A, 5 sec, Injection Molded	68		
Shore Hardness			ISO 868
Shore A, 5 sec, Extruded	65		
Shore A, 5 sec, Injection Molded	68		
Thermal	Nominal Value	Unit	Test Method
RTI Elec	122	°F	UL 746B
RTI Imp	122	°F	UL 746B
RTI Str	122	°F	UL 746B
Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air - Across Flow			ASTM D573
275°F, 1000 hr	5.0	%	
100% Strain, 275°F, 1000 hr	-13	%	
302°F, 168 hr	-4.0	%	
100% Strain, 302°F, 168 hr	-7.0	%	
Change in Tensile Strength in Air - Across Flow			ISO 188
100% Strain 135°F, 1000 hr	5.0	%	
150°F, 168 hr	-13	%	
100% Strain 150°F, 168 hr	-4.0	%	
275°F, 1000 hr	-7.0	%	
Change in Ultimate Elongation in Air - Across Flow			ASTM D573
275°F, 1000 hr	-2.0	%	
302°F, 168 hr	-5.0	%	
Change in Tensile Strain at Break in Air - Across Flow			ISO 188
135°F, 1000 hr	-2.0	%	
302°F, 168 hr	-5.0	%	

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Aging	Nominal Value	Unit	Test Method
Change in Durometer Hardness in Air			ASTM D573
Shore A, 275°F, 1000 hr	2.0		
Shore A, 302°F, 168 hr	1.0		
Change in Shore Hardness in Air			ISO 188
Shore A, 135°F, 1000 hr	2.0		
Shore A, 302°F, 168 hr	1.0		
Change in Volume (257°F, 70 hr, in IRM 903 Oil)	91	%	ASTM D471
Change in Volume (257°F, 70 hr, in IRM 903 Oil)	91	%	ISO 1817
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in, Black)	HB		UL 94
Additional Information	Nominal Value	Unit	Test Method
Apparent Shear Viscosity - Capillary @ 206/s			
392°F	340	Pa·s	ASTM D3835
392°F	340	Pa·s	ISO 11443

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	3.0	hr
Rear Temperature	350 to 420	°F
Middle Temperature	350 to 420	°F
Front Temperature	350 to 420	°F
Nozzle Temperature	370 to 430	°F
Processing (Melt) Temp	360 to 430	°F
Mold Temperature	50 to 150	°F
Back Pressure	10.0 to 150	psi
Screw Speed	100 to 200	rpm
Screw L/D Ratio	20.0:1.0	
Extrusion	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	3.0	hr
Cylinder Zone 1 Temp.	360 to 400	°F
Cylinder Zone 2 Temp.	360 to 400	°F
Cylinder Zone 3 Temp.	370 to 410	°F
Cylinder Zone 4 Temp.	370 to 410	°F
Melt Temperature	380 to 420	°F
Die Temperature	380 to 420	°F
Take-Off Roll	70 to 120	°F

Extrusion Notes

Screen Pack: 20 to 60 Mesh
Screw: General Purpose
Compression Ratio: 3:1

Notes

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

² Method Ba, Angle (Unnicked)