



Sarlink® TPV 17165B

Teknor Apex Company - Thermoplastic Vulcanizate

General Information

Product Description

The Sarlink 17100 Series is the latest generation of super high-flow TPV materials ensuring the best in class surface appearance for injection molded parts. Sarlink 17165B is a medium hardness, low density, high performance thermoplastic vulcanizate that exhibits excellent UV resistance, elasticity, and surface aesthetics designed for demanding automotive applications including window encapsulation and exterior parts.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Good Adhesion • Good Flexibility • Good Moldability • Good Surface Finish	• High Elasticity • High Flow • High Heat Resistance • Low Compression Set • Low Density	• Low Specific Gravity • Medium Hardness • UV Resistant
Uses	• Automotive Applications • Automotive Exterior Parts	• Automotive Window Encapsulation • Rubber Replacement	
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• VAG VW501 23 Color: Black		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.920	g/cm ³	ISO 1183
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ISO 37
Across Flow : 100% Strain	305	psi	
Flow : 100% Strain	348	psi	
Tensile Strength			ISO 37
Across Flow : Break	609	psi	
Flow : Break	595	psi	
Tensile Elongation			ISO 37
Across Flow : Break	450	%	
Flow : Break	380	%	
Tear Strength - Across Flow ²	114	lbf/in	ISO 34-1
Compression Set			ISO 815
73°F, 22 hr	20	%	
158°F, 22 hr	32	%	
257°F, 70 hr	44	%	
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 868
Shore A, 5 sec, Extruded	65		
Shore A, 5 sec, Injection Molded	67		

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Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air - Across Flow			ISO 188
275°F, 1000 hr	-10	%	
302°F, 168 hr	-15	%	
Change in Tensile Modulus in Air - Across Flow			ISO 188
275°F, 1000 hr	5.0	%	
302°F, 168 hr	0.0	%	
Change in Ultimate Elongation in Air - Across Flow			ISO 188
275°F, 1000 hr	-18	%	
302°F, 168 hr	-20	%	
Change in Shore Hardness in Air			ISO 188
275°F, 1000 hr	2.0		
302°F, 168 hr	0.0		
Additional Information	Nominal Value	Unit	Test Method
Apparent Shear Viscosity - Capillary, 206 1/s (392°F)	175	Pa·s	ISO 11443

Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Desiccant Dryer	180	°F
Drying Time - Desiccant Dryer	3.0 to 4.0	hr
Dew Point - Desiccant Dryer	-40	°F
Rear Temperature	356 to 410	°F
Middle Temperature	374 to 428	°F
Front Temperature	392 to 464	°F
Nozzle Temperature	410 to 464	°F
Processing (Melt) Temp	410 to 464	°F
Mold Temperature	50 to 131	°F
Back Pressure	14.5 to 145	psi
Screw Speed	100 to 200	rpm

Notes

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

² Method Ba, Angle (Unnicked)