

Sarlink® TPV 17165B

Teknor Apex Company - Thermoplastic Vulcanizate

Saturday, September 14, 2024

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	<ul style="list-style-type: none"> • Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Features	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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 Properties¹

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	2.10	MPa	
Flow : 100% Strain	2.40	MPa	
Tensile Strength			ISO 37
Across Flow : Break	4.20	MPa	
Flow : Break	4.10	MPa	
Tensile Elongation			ISO 37
Across Flow : Break	450	%	
Flow : Break	380	%	
Tear Strength - Across Flow ²	20.0	kN/m	ISO 34-1
Compression Set			ISO 815
23°C, 22 hr	20	%	
70°C, 22 hr	32	%	
125°C, 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		

Revision Date: 10/30/2023

The information and recommendations contained in this bulletin are, to the best of our knowledge, accurate and reliable but no guarantee of their accuracy is made. All products are sold upon condition that purchasers shall make their own tests to determine the suitability of such products for their particular purposes and uses and purchasers assume all risks and liability for the results of use of the products, including use in accordance with seller's recommendations. Nothing in this bulletin constitutes permission or a recommendation to practice or use any invention covered by any patent owned by this company or by others. There is no warranty of merchantability and there are no other warranties for the products described.

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Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air - Across Flow			ISO 188
135°C, 1000 hr	-10	%	
150°C, 168 hr	-15	%	
Change in Tensile Modulus in Air - Across Flow			ISO 188
135°C, 1000 hr	5.0	%	
150°C, 168 hr	0.0	%	
Change in Ultimate Elongation in Air - Across Flow			ISO 188
135°C, 1000 hr	-18	%	
150°C, 168 hr	-20	%	
Change in Shore Hardness in Air			ISO 188
135°C, 1000 hr	2.0		
150°C, 168 hr	0.0		
Additional Information	Nominal Value	Unit	Test Method
Apparent Shear Viscosity - Capillary, 206 1/s (200°C)	175	Pa·s	ISO 11443

Legal Statement

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Processing Information

Injection	Nominal Value	Unit
Drying Temperature - Desiccant Dryer	82	°C
Drying Time - Desiccant Dryer	3.0 to 4.0	hr
Dew Point - Desiccant Dryer	-40	°C
Rear Temperature	180 to 210	°C
Middle Temperature	190 to 220	°C
Front Temperature	200 to 240	°C
Nozzle Temperature	210 to 240	°C
Processing (Melt) Temp	210 to 240	°C
Mold Temperature	10 to 55	°C
Back Pressure	0.100 to 1.00	MPa
Screw Speed	100 to 200	rpm

Notes

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

² Method Ba, Angle (Unnicked)

Teknor Apex Company Corporate Headquarters	Teknor Apex B.V.	Teknor Apex (Suzhou) Advanced Polymer Compounds Co. Pte. Ltd.	Teknor Apex Asia Pacific PTE. LTD.
<i>In U.S. for Vinyls, TPEs, Colorants,</i>	Brightlands Chemelot Campus Umonderbaan 22	No. 78 Ping Sheng Road	41 Shipyard Road
<i>Engineered Thermoplastics (Chem Polymer)</i>	6167 RD Geleen, Netherlands	Suzhou Industrial Park	Singapore 628134
505 Central Avenue		Jiangsu, China 215126	
Pawtucket, Rhode Island 02861 U.S.	Phone: +31 46 7020 950	Phone: (86) 512-6287-1550	Phone: (65) 6265-2544
	Fax: +31 46 7020 990	Fax: (86) 512-6288-8371	Fax: (65) 6265-1821
Phone: 401-725-8000	www.teknorapex.com	www.teknorapex.com	www.teknorapex.com
Fax: 401-725-8095	tpe@teknorapex.com	infotaap@teknorapex.com	infotaap@teknorapex.com
Toll Free (U.S. only) 800-556-3864			
www.teknorapex.com			
info@teknorapex.com			

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