

Sarlink® TPV 3180

Teknor Apex Company - Thermoplastic Vulcanizate

Thursday, June 29, 2017

General Information

Product Description

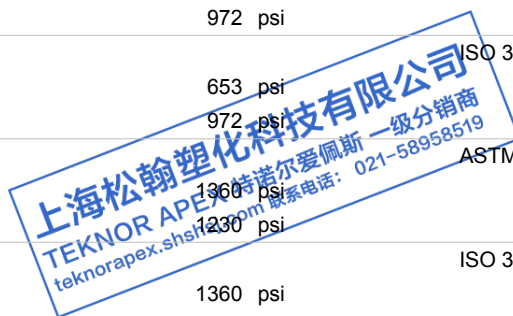
SARLINK® TPV 3100 series are engineered materials designed primarily for general purpose, automotive and industrial applications requiring a good balance of thermal, mechanical, and physical properties. SARLINK® 3180, available in NAT and BLK, is a medium hardness, low density, multi-purpose thermoplastic vulcanizate that can be processed by injection molding, blow molding or extrusion for applications such as grips, seals, gaskets, profiles, hose & tubes, bellows, and other articles.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • General Purpose • Good Adhesion • Good Flexibility	• Good Moldability • Good Processability • Good Surface Finish • Heat Aging Resistant	• Medium Hardness • Resilient • Weather Resistant
Uses	• Agricultural Applications • Appliance Components • Automotive Applications • Automotive Exterior Parts • Automotive Interior Parts	• Automotive Under the Hood • Blow Molding Applications • General Purpose • Industrial Applications • Profiles	• Rubber Replacement • Seals • Weatherstripping
Agency Ratings	• UL 94		
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• CHRYSLER MS-AR-80 Type D Color: Black • CHRYSLER MS-AR-80 Type D Color: Natural • DAIMLER DBL 5562.30 Color: Black • FORD WSD-M2D381-A1 Color: Black	• GM QK 3525 Type 5 Color: Black • GM QK 3525 Type 5 Color: Natural • SAE J3000 Color: Black • SAE J3000 Color: Natural	• VAG VW501 79 Color: Black • VAG VW-TL 526 22 Color: Black • VOLKSWAGEN VW 50180 Color: Black
Appearance	• Black	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Blow Molding	• Extrusion	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.950		ASTM D792
Density	0.950	g/cm ³	ISO 1183
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ASTM D412
Across Flow : 100% Strain	653	psi	
Flow : 100% Strain	972	psi	
Tensile Stress			ISO 37
Across Flow : 100% Strain	653	psi	
Flow : 100% Strain	972	psi	
Tensile Strength			ASTM D412
Across Flow : Break	1360	psi	
Flow : Break	1230	psi	
Tensile Stress			ISO 37
Across Flow : Break	1360	psi	
Flow : Break	1230	psi	



Revision Date: 6/1/2016

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.

Sarlink® TPV 3180

Teknor Apex Company - Thermoplastic Vulcanizate

Elastomers	Nominal Value	Unit	Test Method
Tensile Elongation			ASTM D412
Across Flow : Break	690	%	
Flow : Break	330	%	
Tensile Elongation			ISO 37
Across Flow : Break	690	%	
Flow : Break	330	%	
Tear Strength - Across Flow	290	lbf/in	ASTM D624
Tear Strength - Across Flow ²	290	lbf/in	ISO 34-1
Compression Set			ASTM D395
73°F, 22 hr	32	%	
158°F, 22 hr	50	%	
257°F, 70 hr	65	%	
Compression Set			ISO 815
73°F, 22 hr	32	%	
158°F, 22 hr	50	%	
257°F, 70 hr	65	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 5 sec, Extruded	80		
Shore A, 5 sec, Injection Molded	84		
Shore Hardness			ISO 868
Shore A, 5 sec, Extruded	80		
Shore A, 5 sec, Injection Molded	84		
Thermal	Nominal Value	Unit	Test Method
RTI Elec	122	°F	UL 746
RTI Imp	122	°F	UL 746
RTI Str	122	°F	UL 746
Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air - Across Flow			ASTM D573
275°F, 1000 hr	-9.0	%	
100% Strain, 275°F, 1000 hr	17	%	
302°F, 168 hr	-8.0	%	
100% Strain, 302°F, 168 hr	9.0	%	
Change in Tensile Strength in Air - Across Flow			ISO 188
275°F, 1000 hr	-9.0	%	
100% Strain 275°F, 1000 hr	17	%	
302°F, 168 hr	-8.0	%	
100% Strain 302°F, 168 hr	9.0	%	
Change in Ultimate Elongation in Air - Across Flow			ASTM D573
275°F, 1000 hr	-15	%	
302°F, 168 hr	-16	%	
Change in Tensile Strain at Break in Air - Across Flow			ISO 188
275°F, 1000 hr	15	%	
302°F, 168 hr	16	%	
Change in Durometer Hardness in Air			ASTM D573
Shore A, 275°F, 1000 hr	0.0		
Shore A, 302°F, 168 hr	2.0		



Revision Date: 6/1/2016

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.

Sarlink® TPV 3180

Teknor Apex Company - Thermoplastic Vulcanizate

Aging	Nominal Value	Unit	Test Method
Change in Shore Hardness in Air			ISO 188
Shore A, 275°F, 1000 hr	0.0		
Shore A, 302°F, 168 hr	2.0		
Change in Volume (257°F, 70 hr, in IRM 903 Oil)	95	%	ASTM D471
Change in Volume (257°F, 70 hr, in IRM 903 Oil)	95	%	ISO 1817
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in, Natural and Black Colors)	HB		UL 94
Additional Information	Nominal Value	Unit	Test Method
Apparent Shear Viscosity			
Capillary : 392°F	290	Pa·s	ASTM D3835
Capillary, @ 206/s : 392°F	290	Pa·s	ISO 11443

Legal Statement

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 purchaser assumes 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 others. There is no warranty of merchantability and there are no other warranties for the products described. For detailed Product Stewardship information, please contact us. Any product of Teknor Apex, including product names, shall not be used or tested in medical or food contact applications without the prior written acknowledgement of Teknor Apex as to the intended use. Please note that some products may not be available in one or more countries.

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	3.0	hr
Rear Temperature	356 to 419	°F
Middle Temperature	356 to 419	°F
Front Temperature	356 to 419	°F
Nozzle Temperature	369 to 428	°F
Processing (Melt) Temp	365 to 428	°F
Mold Temperature	50 to 131	°F
Back Pressure	14.5 to 145	psi
Screw Speed	100 to 200	rpm
Extrusion	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	3.0	hr
Cylinder Zone 1 Temp.	356 to 392	°F
Cylinder Zone 2 Temp.	356 to 401	°F
Cylinder Zone 3 Temp.	369 to 410	°F
Cylinder Zone 4 Temp.	369 to 410	°F
Melt Temperature	383 to 419	°F
Die Temperature	383 to 419	°F
Take-Off Roll	68 to 122	°F
Extrusion Notes		
Screen Pack: 20 to 60 mesh		
Screw: general purpose		
Compression Ratio: 3:1		



Revision Date: 6/1/2016

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.

Sarlink® TPV 3180

Teknor Apex Company - Thermoplastic Vulcanizate

Notes

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

² Method Ba, Angle (Unnicked)

Teknor Apex Company Corporate Headquarters

*In U.S. for Vinyls, TPEs, Colorants,
Engineered Thermoplastics (Chem Polymer)*
505 Central Avenue
Pawtucket, Rhode Island 02861 U.S.

Phone: 401-725-8000
Fax: 401-725-8095
Toll Free (U.S. only) 800-556-3864

Teknor Apex U.K. Ltd.

Tat Bank Road
Oldbury, West Midlands B69 4NH England

Phone: (44) 121-665-2100
Fax: (44) 121-544-5530

etpsales@teknorapex.co.uk

info@teknorapex.com

上海松翰塑化科技有限公司
TEKNOR APEX 特诺尔爱佩斯 一级分销商
teknorapex.shshsj.com 联系电话: 021-58958519

Revision Date: 6/1/2016

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.