# Sarlink<sup>®</sup> TPV 3145D

## Teknor Apex Company - Thermoplastic Vulcanizate

Thursday, June 29, 2017

#### **General Information**

#### **Product Description**

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SARLINK® TPV 3145D is a general purpose thermoplastic vulcanizate featuring excellent flex fatigue resistance, heat aging and resilience. SARLINK® 3145D is a high hardness, low density grade offered in Nat and Black for use in injection molded parts, sheet and profile extrusions such as weather-stripping and can also be blow molded into boots and ducts.

Material Status	<ul> <li>Commercial: Active</li> </ul>		
Availability	<ul><li> Africa &amp; Middle East</li><li> Asia Pacific</li></ul>	<ul><li>Europe</li><li>Latin America</li></ul>	North America
Features	<ul> <li>Chemical Resistant</li> <li>Fatigue Resistant</li> <li>General Purpose</li> <li>Good Adhesion</li> <li>Good Moldability</li> </ul>	<ul> <li>Good Processability</li> <li>Good Surface Finish</li> <li>High Hardness</li> <li>Low Density</li> <li>Low Specific Gravity</li> </ul>	<ul><li>Medium Heat Resistance</li><li>Resilient</li><li>Weather Resistant</li></ul>
Uses	<ul> <li>Automotive Applications</li> <li>Automotive Exterior Parts</li> <li>Automotive Interior Parts</li> <li>Automotive Under the Hood</li> </ul>	<ul> <li>Blow Molding Applications</li> <li>Grommets</li> <li>Industrial Applications</li> <li>Plugs</li> </ul>	<ul><li> Profiles</li><li> Rubber Replacement</li><li> Weatherstripping</li></ul>
Agency Ratings	• UL 94		
RoHS Compliance	<ul> <li>RoHS Compliant</li> </ul>		
Automotive Specifications	<ul> <li>FORD WSK-M4D712-A1 Color: Black</li> <li>FORD WSK-M4D712-A1 Color: Natural</li> <li>GM QK 3533 Type 3 Color: Black</li> <li>GM QK 3533 Type 3 Color: Black</li> <li>PSA Peugeot-Citroën B62 0300 version G Color: Black</li> <li>VOLVO STD 412-0001 Color: Black</li> </ul>		
Appearance	Black	Natural Color	Opaque
Forms	Pellets		
Processing Method	Blow Molding	Extrusion	<ul> <li>Injection Molding</li> </ul>

#### **ASTM & ISO Properties 1** Physical Nominal Value Unit **Test Method** Specific Gravity 0.940 ASTM D792 Density 0.940 g/cm3 ISO 1183 Elastomers Nominal Value Unit **Test Method** Tensile Stress ASTM D412 Across Flow : 100% Strain 1860 psi Flow : 100% Strain 2250 psi 3260 1841支有限公司 3260 1841支有限公司 ASTM D412 上海松本和EX 特許 18810 285水差風新 021-58958519 ISO 37 Tensile Stress Across Flow : 100% Strain Flow : 100% Strain **Tensile Strength** IEKNUK APEX 特諾が差別期 一級分群角5 teknorapex.shs3260 psi 28--Across Flow : Break Flow : Break **Tensile Stress** Across Flow : Break Flow : Break

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lastomers	Nominal Value	Unit	Test Method
Tensile Elongation			ASTM D412
Across Flow : Break	700	%	
Flow : Break	400	%	
Tensile Elongation			ISO 37
Across Flow : Break	700	%	
Flow : Break	400	%	
Tear Strength - Across Flow	750	lbf/in	ASTM D624
Tear Strength - Across Flow <sup>2</sup>	750	lbf/in	ISO 34-1
Compression Set			ASTM D395
73°F, 22 hr	57	%	
158°F, 22 hr	70	%	
257°F, 70 hr	90	%	
Compression Set			ISO 815
73°F, 22 hr	57	%	
158°F, 22 hr	70	%	
257°F, 70 hr	90	%	
lardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore D, 5 sec, Extruded	47		
Shore D, 5 sec, Injection Molded	50		
Shore Hardness			ISO 868
Shore D, 5 sec, Extruded	47		
Shore D, 5 sec, Injection Molded	50		
Thermal	Nominal Value	Unit	Test Method
RTI Elec	122		UL 746
RTI Imp	122		UL 746
RTI Str	122		UL 746
	Nominal Value		Test Method
Aging		Unit	
Change in Tensile Strength in Air - Across Flow	2.0	0/	ASTM D573
275°F, 1000 hr 100% Stroip 275°E 1000 hr			
100% Strain, 275°F, 1000 hr	16		
302°F, 168 hr	-5.0		
100% Strain, 302°F, 168 hr	8.0	70	100 400
Change in Tensile Strength in Air - Across Flow		0/	ISO 188
275°F, 1000 hr	2.0		
100% Strain 275°F, 1000 hr	16		
302°F, 168 hr	-5.0		
100% Strain 302°F, 168 hr	8.0	%	
Change in Ultimate Elongation in Air - Across Flow		0/	ASTM D573
275°F, 1000 hr	-11	%	() 国()
302°F, 168 hr	-11	*****	民心 前前
Change in Tensile Strain at Break in Air - Across Flow	IV	FHJX THE	188 589585 SO 188
275°F, 1000 hr	小韵塑料	常尔爱师 02	1-00-
302°F, 168 hr	-11 -11 -11 -11 -11 -11 -11 -11 -11 -11	而供亲电师	
Change in Durometer Hardness in Air	LKNOR Ashshsl.co		ASTM D573
Shore D, 275°F, 1000 hr	TERNorapex. 1.0		
Shore D, 302°F, 168 hr	ten. 2.0		

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Aging	Nominal Value	Unit	Test Method
Change in Shore Hardness in Air			ISO 188
Shore D, 275°F, 1000 hr	1.0		
Shore D, 302°F, 168 hr	2.0		
Change in Volume (257°F, 70 hr, in IRM 903 Oil)	52	%	ASTM D471
Change in Volume (257°F, 70 hr, in IRM 903 Oil)	52	%	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, @ 206/s			
392°F	310	Pa∙s	ISO 11443
		Pa·s	ASTM D3835

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.井有WR 山前商		
Extrusion Notes	LAXX	<sup>◦</sup> F <sup>◦</sup> F <b>F</b> <b>F</b> <b>F</b> <b>F</b> <b>F</b> <b>F</b> <b>F</b> <b>F</b> <b>F</b> <b>F</b>		
Screen Pack: 20 to 60 mesh		描尔是 021		
Screw: general purpose	- APEX	而 联系		
Compression Ratio: 3:1	TEKNOR shshsl.	◎F F F F F F F F F F F F F F F F F F F		

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#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

### <sup>2</sup> Method Ba, Angle (Unnicked)

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