



Sarlink® TPV 14065

Teknor Apex Company - Thermoplastic Vulcanizate

General Information

Product Description

SARLINK® 14065B BLK is a low density, medium hardness thermoplastic vulcanizate that is designed specifically for demanding automotive and industrial applications. It exhibits excellent compression set, flex fatigue, high and low temperature performance. SARLINK® 14065B BLK can be processed by injection molding, blow molding and extrusion for applications such as seals, gaskets, chemical resistant hose and tube, boots and bellows.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific • Europe	• Latin America • North America	
Features	• Chemical Resistant • Excellent Elastic Recovery • Fatigue Resistant • Good Adhesion • Good Flexibility	• Good Moldability • Good Processability • Good Surface Finish • High Melt Stability • Low Density	• Medium Hardness • Medium Heat Resistance • Resilient
Uses	• Appliance Components • Automotive Applications • Automotive Exterior Parts • Automotive Interior Parts • Automotive Under the Hood • Blow Molding Applications	• Gaskets • Grommets • Hose • Industrial Applications • O-rings • Pipe Seals	• Plugs • Rubber Replacement • Seals • Tubing • White Goods & Small Appliances
Agency Ratings	• UL QMFZ2	• UL QMFZ8	
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• BMW Unspecified Color: Black • CHRYSLER MS-AR-100 BGN Color: Black • CHRYSLER MS-AR-100 BGN Color: Natural • FORD WSD-M2D378-A6 Color: Black	• FORD WSD-M2D379-A1 Color: Black • FORD WSD-M2D379-A1 Color: Natural • GM GMP.E/P.002 Color: Black • GM GMP.E/P.002 Color: Natural	• GM GMW15813 Type 5 Color: Black • GM GMW15813 Type 5 Color: Natural • GM QK 3521 Type 1 Color: Black • GM QK 3521 Type 1 Color: Natural
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Blow Molding	• Extrusion	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.944		ASTM D792
Density	0.942	g/cm ³	ISO 1183
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress - Across Flow			
100% Strain	377	psi	ISO 37
100% Strain	377	psi	ASTM D412
Tensile Stress - Across Flow			
Break	1020	psi	ISO 37
Break	1020	psi	ASTM D412
Tensile Elongation - Across Flow			
Break	650	%	ISO 37
Break	650	%	ASTM D412
Tear Strength - Across Flow	166	lbf/in	ASTM D624
Tear Strength - Across Flow ²	170	lbf/in	ISO 34-1

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Elastomers	Nominal Value	Unit	Test Method
Compression Set			
158°F, 22 hr	35	%	ISO 815
158°F, 22 hr	35	%	ASTM D395
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			
Shore A, 5 sec, Extruded	63		ISO 868
Shore A, 5 sec, Extruded	63		ASTM D2240
Shore A, 5 sec, Injection Molded	65		ISO 868
Shore A, 5 sec, Injection Molded	65		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	-85.0	°F	ASTM D746
RTI Elec	212	°F	UL 746
RTI Imp	149	°F	UL 746
RTI Str	212	°F	UL 746
Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air - Across Flow			
275°F, 1000 hr	-9.0	%	ISO 188
275°F, 1000 hr	-9.0	%	ASTM D573
302°F, 168 hr	-11	%	ISO 188
302°F, 168 hr	-11	%	ASTM D573
100% Strain 302°F, 168 hr	0.0	%	ISO 188
100% Strain 302°F, 168 hr	0.0	%	ASTM D573
100% Strain 302°F, 1000 hr	4.0	%	ISO 188
100% Strain 302°F, 1000 hr	4.0	%	ASTM D573
Change in Tensile Strain at Break in Air - Across Flow			
275°F, 1000 hr	-8.0	%	ISO 188
275°F, 1000 hr	-8.0	%	ASTM D573
302°F, 168 hr	-11	%	ISO 188
302°F, 168 hr	-11	%	ASTM D573
Change in Shore Hardness in Air			
Shore A, 275°F, 1000 hr	2.0		ISO 188
Shore A, 275°F, 1000 hr	2.0		ASTM D573
Shore A, 302°F, 168 hr	2.0		ISO 188
Shore A, 302°F, 168 hr	2.0		ASTM D573
Change in Volume			
257°F, 70 hr, in IRM 903 Oil	83	%	ISO 1817
257°F, 70 hr, in IRM 903 Oil	83	%	ASTM D471
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+16	ohms·cm	ASTM D257
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.04 in, All Colors)	HB		UL 94
Additional Information	Nominal Value	Unit	Test Method
Apparent Shear Viscosity - Capillary, @ 206/s			
392°F	305	Pa·s	ISO 11443
392°F	305	Pa·s	ASTM D3835

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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		
Notes		
¹ Typical properties: these are not to be construed as specifications.		
² Method Ba, Angle (Unnicked)		