



Sarlink® TPV 18035

Teknor Apex Company - Thermoplastic Vulcanizate

General Information

Product Description

Sarlink TPV 18035 is a high performance thermoplastic vulcanizate used in automotive and industrial applications. Sarlink TPV 18035 is a low hardness, low density grade exhibiting superior compression set and chemical resistance. This grade can be processed by injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific • Europe	• Latin America • North America	
Features	• Chemical Resistant • General Purpose • Good Adhesion • Good Flexibility	• Good Moldability • Good Processability • High Elasticity • Low Density	• Low Hardness • Resilient
Uses	• Automotive Applications • Automotive Interior Parts • Automotive Under the Hood • Diaphragms • Gaskets	• General Purpose • Industrial Applications • O-rings • Plugs • Profiles	• Rubber Replacement • Seals • Weatherstripping
RoHS Compliance	• RoHS Compliant		
Appearance	• Black	• Opaque	
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.930	g/cm ³	ISO 1183
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ISO 37
Across Flow : 100% Strain	160	psi	
Flow : 100% Strain	305	psi	
Tensile Stress			ISO 37
Across Flow : Break	580	psi	
Flow : Break	319	psi	
Tensile Elongation			ISO 37
Across Flow : Break	600	%	
Flow : Break	200	%	
Tear Strength - Across Flow ²	85.7	lbf/in	ISO 34-1
Compression Set			ISO 815
73°F, 22 hr	15	%	
158°F, 22 hr	30	%	
257°F, 70 hr	52	%	
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 868
Shore A, 5 sec, Extruded	38		
Shore A, 5 sec, Injection Molded	43		

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Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air - Across Flow			ISO 188
275°F, 1000 hr	0.0	%	
100% Strain 275°F, 1000 hr	4.0	%	
302°F, 168 hr	4.0	%	
100% Strain 302°F, 168 hr	11	%	
Change in Tensile Strain at Break in Air - Across Flow			ISO 188
275°F, 1000 hr	-2.0	%	
302°F, 168 hr	1.0	%	
Change in Shore Hardness in Air			ISO 188
Shore A, 275°F, 1000 hr	-1.0		
Shore A, 302°F, 168 hr	1.0		
Change in Volume (257°F, 70 hr, in IRM 903 Oil)	150	%	ISO 1817
Additional Information	Nominal Value	Unit	Test Method
Apparent Shear Viscosity - Capillary, 206 1/s (392°F)	270	Pa·s	ISO 11443

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	3.0	hr
Rear Temperature	347 to 419	°F
Middle Temperature	347 to 419	°F
Front Temperature	347 to 419	°F
Nozzle Temperature	365 to 428	°F
Processing (Melt) Temp	356 to 428	°F
Mold Temperature	50 to 140	°F
Extrusion	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	3.0	hr
Cylinder Zone 1 Temp.	356 to 392	°F
Cylinder Zone 2 Temp.	356 to 392	°F
Cylinder Zone 3 Temp.	374 to 410	°F
Cylinder Zone 4 Temp.	374 to 410	°F
Melt Temperature	374 to 428	°F
Die Temperature	374 to 428	°F

Notes

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

² Method Ba, Angle (Unnicked)