



Sarlink® TPV 22035N

Teknor Apex Company - Thermoplastic Vulcanizate

General Information

Product Description

Sarlink® 22035N is a highly engineered thermoplastic vulcanizate that can also be used as a compound masterbatch for use in demanding automotive and industrial applications. Sarlink® 22035N is a low hardness, low density grade with exceptional tensile strength, superior compression set, chemical resistance and high temperature performance. It can be easily processed by injection molding, blow molding or extrusion for various applications such as boots and bellows, seals, gaskets as well as other profiles and articles.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Good Processability • High Heat Resistance	• High Tensile Strength • Low Compression Set • Low Density	• Low Hardness • Low Specific Gravity
Uses	• Automotive Applications • Constant Velocity Joint Boots • Gaskets	• Industrial Applications • Profiles • Rubber Replacement	• Seals
RoHS Compliance	• RoHS Compliant		
Appearance	• Opaque		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.922		ASTM D792
Density	0.920	g/cm ³	ISO 1183
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ASTM D412
Across Flow : 100% Strain	145	psi	
Flow : 100% Strain	305	psi	
Tensile Stress			ISO 37
Across Flow : 100% Strain	145	psi	
Flow : 100% Strain	305	psi	
Tensile Strength			ASTM D412
Across Flow : Break	493	psi	
Flow : Break	348	psi	
Tensile Stress			ISO 37
Across Flow : Break	493	psi	
Flow : Break	348	psi	
Tensile Elongation			ASTM D412
Across Flow : Break	480	%	
Flow : Break	160	%	
Tensile Elongation			ISO 37
Across Flow : Break	480	%	
Flow : Break	160	%	
Tear Strength - Across Flow	62.8	lbf/in	ASTM D624
Tear Strength - Across Flow ²	62.8	lbf/in	ISO 34-1

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Elastomers	Nominal Value	Unit	Test Method
Compression Set			ASTM D395
73°F, 22 hr	12	%	
158°F, 22 hr	21	%	
257°F, 70 hr	37	%	
Compression Set			ISO 815
73°F, 22 hr	12	%	
158°F, 22 hr	21	%	
257°F, 70 hr	37	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 5 sec, Extruded	39		
Shore A, 5 sec, Injection Molded	41		
Shore Hardness			ISO 868
Shore A, 5 sec, Extruded	39		
Shore A, 5 sec, Injection Molded	41		
Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air - Across Flow			ASTM D573
275°F, 1000 hr	6.0	%	
100% Strain, 275°F, 1000 hr	5.0	%	
302°F, 168 hr	3.0	%	
100% Strain, 302°F, 168 hr	-2.0	%	
Change in Tensile Strength in Air - Across Flow			ISO 188
275°F, 1000 hr	6.0	%	
100% Strain 275°F, 1000 hr	5.0	%	
302°F, 168 hr	3.0	%	
100% Strain 302°F, 168 hr	-2.0	%	
Change in Ultimate Elongation in Air - Across Flow			ASTM D573
275°F, 1000 hr	25	%	
302°F, 168 hr	16	%	
Change in Tensile Strain at Break in Air - Across Flow			ISO 188
275°F, 1000 hr	25	%	
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	0.0		
Change in Shore Hardness in Air			ISO 188
Shore A, 275°F, 1000 hr	0.0		
Shore A, 302°F, 168 hr	0.0		
Change in Volume (257°F, 70 hr, in IRM 903 Oil)	120	%	ASTM D471
Change in Volume (257°F, 70 hr, in IRM 903 Oil)	120	%	ISO 1817
Additional Information	Nominal Value	Unit	Test Method
Apparent Shear Viscosity - Capillary, @ 206/s			
392°F	300	Pa·s	ASTM D3835
392°F	300	Pa·s	ISO 11443

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Processing Information		
Injection	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	3.0	hr
Rear Temperature	350 to 420	°F
Middle Temperature	350 to 420	°F
Front Temperature	350 to 420	°F
Nozzle Temperature	370 to 430	°F
Processing (Melt) Temp	360 to 430	°F
Mold Temperature	50 to 150	°F
Back Pressure	10.0 to 150	psi
Screw Speed	100 to 200	rpm
Screw L/D Ratio	20.0:1.0	
Extrusion	Nominal Value	Unit
Drying Temperature	180	°F
Drying Time	3.0	hr
Cylinder Zone 1 Temp.	360 to 400	°F
Cylinder Zone 2 Temp.	360 to 400	°F
Cylinder Zone 3 Temp.	370 to 410	°F
Cylinder Zone 4 Temp.	370 to 410	°F
Melt Temperature	380 to 420	°F
Die Temperature	380 to 420	°F
Take-Off Roll	70 to 120	°F
Extrusion Notes		
Screen Pack: 20 to 60 mesh		
Screw: 3:1 Compression Ratio		

Notes

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

² Method Ba, Angle (Unnicked)