



Sarlink® TPV 23080N

Teknor Apex Company - Thermoplastic Vulcanizate

General Information

Product Description

Sarlink® 23080N is a highly engineered thermoplastic vulcanizate that can be used in demanding automotive and industrial applications. Sarlink® X23080N is a medium hardness, low density, RoHS compliant grade with exceptional tensile strength, superior compression set, chemical resistance and high temperature performance. It can be easily processed by injection molding, extrusion, or thermoforming.

General

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

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.902		ASTM D792
Density	0.900	g/cm ³	ISO 1183
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ASTM D412
Across Flow : 100% Strain	609	psi	
Flow : 100% Strain	1030	psi	
Tensile Stress			ISO 37
Across Flow : 100% Strain	609	psi	
Flow : 100% Strain	1030	psi	
Tensile Strength			ASTM D412
Across Flow : Break	1450	psi	
Flow : Break	1120	psi	
Tensile Stress			ISO 37
Across Flow : Break	1450	psi	
Flow : Break	1120	psi	
Tensile Elongation			ASTM D412
Across Flow : Break	780	%	
Flow : Break	290	%	
Tensile Elongation			ISO 37
Across Flow : Break	780	%	
Flow : Break	290	%	
Tear Strength - Across Flow	274	lbf/in	ASTM D624
Tear Strength - Across Flow ²	272	lbf/in	ISO 34-1

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Elastomers	Nominal Value	Unit	Test Method
Compression Set			ASTM D395
73°F, 22 hr	33	%	
158°F, 22 hr	51	%	
Compression Set			ISO 815
73°F, 22 hr	33	%	
158°F, 22 hr	51	%	
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		
Additional Information	Nominal Value	Unit	Test Method
Apparent Shear Viscosity - Capillary, @ 206/s			
392°F	504	Pa·s	ASTM D3835
392°F	504	Pa·s	ISO 11443

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
Extrusion	Nominal Value	Unit
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)