



Sarlink® TPV X23080N

Teknor Apex Company - Thermoplastic Vulcanizate

General Information

Product Description

Sarlink® X23080N is a highly engineered thermoplastic vulcanizate that can also be used as a compound masterbatch for use in demanding automotive and industrial applications. Sarlink® X23080N is a medium 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, 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 Hardness • Low Specific Gravity
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
Specific Gravity	0.904		ASTM D792
Density	0.902	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	272	lbf/in	ASTM D624
Tear Strength - Across Flow ²	270	lbf/in	ISO 34-1
Compression Set			ASTM D395
73°F, 22 hr	33	%	
158°F, 22 hr	51	%	

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Elastomers	Nominal Value	Unit	Test Method
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	ISO 11443
392°F	504	Pa·s	ASTM D3835

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			