

Sarlink® 3139D**Thermoplastic Vulcanizate****Teknor Apex Company (Sarlink)** [Web](#)**Product Description**

SARLINK® 3139D is a high hardness, multi-purpose thermoplastic elastomer featuring excellent resiliency, heat resistance and flex fatigue resistance. SARLINK® 3139D can be processed by injection molding, extrusion and blow molding to produce clamps, grommets, profiles, boots, ducts and bellows.

General

Material Status	• Commercial: Active		
Literature ¹	• Technical Datasheet (English)		
UL Yellow Card ²	• E54709-101009566		
Search for UL Yellow Card	• Sarlink®		
Availability	• Asia Pacific	• North America	
	• Europe	• South America	
Features	• Fatigue Resistant	• Medium Heat Resistance	
	• High Hardness	• Resilient	
Uses	• Grommets	• Profiles	
Forms	• Pellets		
Processing Method	• Blow Molding	• Extrusion	• Injection Molding

Physical	Nominal Value	Unit	Test Method
Density	0.940	g/cm ³	ISO 1183
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 868
Shore D, 5 sec, Extruded	38		
Shore D, 5 sec, Injection Molded	41		
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ISO 37
Across Flow: 100% Strain	1290	psi	
Flow: 100% Strain	1930	psi	
Tensile Stress			ISO 37
Across Flow: Break	2680	psi	
Flow: Break	2520	psi	
Tensile Elongation			ISO 37
Across Flow: Break	700	%	
Flow: Break	400	%	
Tear Strength - Across Flow ³	580	lbf/in	ISO 34-1
Compression Set			ISO 815
73°F, 22.0 hr	53	%	
158°F, 22.0 hr	67	%	
257°F, 70.0 hr	85	%	
Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air - Across Flow			ISO 188

275°F, 1000 hr	-5.0 %	
100% Strain 275°F, 1000 hr	9.0 %	
302°F, 168 hr	-7.0 %	
100% Strain 302°F, 168 hr	11 %	
Change in Tensile Strain at Break in Air - Across Flow		ISO 188
275°F, 1000 hr	90 %	
302°F, 168 hr	89 %	
Change in Shore Hardness in Air		ISO 188
Shore D, 275°F, 1000 hr	0.0	
Shore D, 302°F, 168 hr	1.0	
Change in Volume (257°F, 70 hr, in IRM 903 Oil)	55 %	ISO 1817

Additional Information**Nominal Value Unit**

Apparent Shear Viscosity - Capillary, 206 1/s (392°F)	310 Pa·s
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Injection**Nominal Value Unit**

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	50.0 to 131 °F
Back Pressure	14.5 to 145 psi
Screw Speed	100 to 200 rpm

Extrusion**Nominal Value Unit**

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	68.0 to 122 °F

Extrusion Notes

Screen Pack: 20 to 60 mesh
 Screw: general purpose
 Compression Ratio: 3:1