



# Sarlink® TPE EE-2270N-01

Teknor Apex Company - Thermoplastic Elastomer

## General Information

### Product Description

Sarlink TPE EE-2270N-01 is a general purpose thermoplastic elastomer designed for automotive exterior applications including trim and weatherstripping. Sarlink TPE 2270N-01 is a medium hardness, low density UV stabilized grade suitable for extrusion.

### General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Bondability • Filled • Good Colorability • Good Melt Strength • Good Processability • Good Processing Stability	• Good Strength • Halogen Free • High Elongation • Light Stabilized • Low Density • Low Flow	• Low Specific Gravity • Lubricated • Medium Hardness • Slip
Uses	• Automotive Applications • Automotive Exterior Parts	• Automotive Exterior Trim • Automotive Interior Parts	• Grommets • Weatherstripping
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Extrusion		

## ASTM & ISO Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Density	0.920	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	5.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress <sup>2</sup>			ISO 37
Across Flow : 100% Strain	306	psi	
Flow : 100% Strain	403	psi	
Tensile Stress <sup>2</sup>			ISO 37
Across Flow : Break	1540	psi	
Flow : Break	1120	psi	
Tensile Elongation <sup>2</sup>			ISO 37
Across Flow : Break	770	%	
Flow : Break	610	%	
Tear Strength <sup>3</sup>			ISO 34-1
Across Flow	202	lbf/in	
Flow	206	lbf/in	
Compression Set <sup>4</sup>			ISO 815
73°F, 22 hr	24	%	
158°F, 22 hr	52	%	
194°F, 70 hr	65	%	
257°F, 70 hr	81	%	

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Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 868
Shore A, 1 sec, Injection Molded	72		
Shore A, 5 sec, Injection Molded	68		
Shore A, 15 sec, Injection Molded	67		
Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air <sup>5</sup>			ISO 188
Across Flow : 230°F, 1008 hr	3.7	%	
Flow : 230°F, 1008 hr	-0.40	%	
Across Flow : 100% Strain 230°F, 1008 hr	13	%	
Flow : 100% Strain 230°F, 1008 hr	7.6	%	
Across Flow : 257°F, 168 hr	-0.90	%	
Flow : 257°F, 168 hr	-3.9	%	
Across Flow : 100% Strain 257°F, 168 hr	11	%	
Flow : 100% Strain 257°F, 168 hr	9.4	%	
Change in Tensile Strain at Break in Air <sup>5</sup>			ISO 188
Across Flow : 230°F, 1008 hr	-1.6	%	
Flow : 230°F, 1008 hr	0.0	%	
Across Flow : 257°F, 168 hr	-3.9	%	
Flow : 257°F, 168 hr	-3.3	%	
Change in Shore Hardness in Air			ISO 188
Shore A, 230°F, 1008 hr <sup>6</sup>	6.4		
Shore A, 230°F, 1008 hr <sup>7</sup>	6.1		
Shore A, 230°F, 1008 hr <sup>8</sup>	4.9		
Shore A, 257°F, 168 hr <sup>6</sup>	4.4		
Shore A, 257°F, 168 hr <sup>7</sup>	4.0		
Shore A, 257°F, 168 hr <sup>8</sup>	3.3		
Fill Analysis	Nominal Value	Unit	Test Method
Apparent Viscosity (392°F, 206 sec <sup>-1</sup> )	244	Pa·s	ASTM D3835

### Processing Information

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	380 to 400	°F
Cylinder Zone 2 Temp.	390 to 410	°F
Cylinder Zone 3 Temp.	400 to 420	°F
Cylinder Zone 4 Temp.	400 to 420	°F
Cylinder Zone 5 Temp.	410 to 430	°F
Die Temperature	420 to 440	°F

#### Extrusion Notes

Screw Speed: 30 to 100 rpm

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Type 1, 20 in/min

<sup>3</sup> Method Ba, Angle (Unnicked), 20 in/min