



Sarlink® TPE EE-1240N

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Sarlink EE-1240 is a general purpose thermoplastic elastomer with good elastic properties designed for exterior automotive applications.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Filled • Good Colorability • Good Processability	• High Density • High Specific Gravity • Low Flow	• Low Hardness • Lubricated • Slip
Uses	• Automotive Applications • Automotive Exterior Parts • Automotive Exterior Trim	• Automotive Interior Parts • General Purpose • Grommets	• Weatherstripping
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.17	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	0.20	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ISO 37
Across Flow : 100% Strain	100	psi	
Flow : 100% Strain	167	psi	
Tensile Stress ²			ISO 37
Across Flow : Break	783	psi	
Flow : Break	493	psi	
Tensile Elongation ²			ISO 37
Across Flow : Break	890	%	
Flow : Break	660	%	
Tear Strength ³			ISO 34-1
Across Flow	86	lbf/in	
Flow	110	lbf/in	
Compression Set ⁴			ISO 815
73°F, 22 hr	11	%	
158°F, 22 hr	28	%	
194°F, 70 hr	56	%	
257°F, 70 hr	76	%	
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 868
Shore A, 1 sec, Injection Molded	45		
Shore A, 5 sec, Injection Molded	42		
Shore A, 15 sec, Injection Molded	40		

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Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air ⁵			ISO 188
Across Flow : 230°F, 1008 hr	30	%	
Flow : 230°F, 1008 hr	47	%	
Across Flow : 100% Strain 230°F, 1008 hr	7.3	%	
Flow : 100% Strain 230°F, 1008 hr	-3.5	%	
Across Flow : 257°F, 168 hr	39	%	
Flow : 257°F, 168 hr	56	%	
Across Flow : 100% Strain 257°F, 168 hr	12	%	
Flow : 100% Strain 257°F, 168 hr	-3.5	%	
Change in Tensile Strain at Break in Air ⁵			ISO 188
Across Flow : 230°F, 1008 hr	-1.1	%	
Flow : 230°F, 1008 hr	20	%	
Across Flow : 257°F, 168 hr	3.0	%	
Flow : 257°F, 168 hr	27	%	
Change in Shore Hardness in Air			ISO 188
Shore A, 230°F, 1008 hr ⁶	4.0		
Shore A, 230°F, 1008 hr ⁷	3.3		
Shore A, 230°F, 1008 hr ⁸	2.2		
Shore A, 257°F, 168 hr ⁶	0.90		
Shore A, 257°F, 168 hr ⁷	0.60		
Shore A, 257°F, 168 hr ⁸	0.20		
Fill Analysis	Nominal Value	Unit	Test Method
Apparent Viscosity (392°F, 206 sec ⁻¹)	258	Pa·s	ASTM D3835

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	390 to 430	°F
Middle Temperature	460 to 500	°F
Front Temperature	460 to 500	°F
Nozzle Temperature	460 to 500	°F
Processing (Melt) Temp	460 to 500	°F
Mold Temperature	60 to 90	°F
Injection Pressure	200 to 1000	psi
Injection Rate	Fast	
Back Pressure	25.0 to 125	psi
Screw Speed	50 to 120	rpm
Cushion	0.150 to 1.00	in

Injection Notes

Drying is not necessary. However, if moisture is a problem, dry the pellets for 2 to 4 hours at 150°F (65°C).

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Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	440 to 480	°F
Cylinder Zone 2 Temp.	440 to 480	°F
Cylinder Zone 3 Temp.	440 to 480	°F
Cylinder Zone 4 Temp.	440 to 480	°F
Cylinder Zone 5 Temp.	440 to 480	°F
Die Temperature	440 to 480	°F

Extrusion Notes

Screw Speed: 30 to 100 rpm

Notes

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

² Type 1, 20 in/min

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

⁴ Type A

⁵ Type 1

⁶ 15 sec

⁷ 5 sec

⁸ 1 sec