



Sarlink® TPE ME-1345N

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Sarlink ME-1345N is a general purpose thermoplastic elastomer used in automotive applications, including exterior. Sarlink ME-1345N is a medium hardness, low density, lubricated grade that can be processed by injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Bondability • Good Colorability • Good Mold Release • Good Moldability • Good Processability	• Halogen Free • Low Density • Low Flow • Low Specific Gravity • Low Viscosity	• Lubricated • Medium Hardness • Slip • Without Fillers
Uses	• Additive • Automotive Applications	• Automotive Exterior Parts • Automotive Exterior Trim	
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent	• Colors Available	• Natural Color
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.890	g/cm ³	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 ²			ISO 37
Across Flow : 100% Strain	106	psi	
Flow : 100% Strain	197	psi	
Tensile Stress ²			ISO 37
Across Flow : Break	841	psi	
Flow : Break	276	psi	
Tensile Elongation ²			ISO 37
Across Flow : Break	820	%	
Flow : Break	350	%	
Tear Strength ³			ISO 34-1
Across Flow	70	lbf/in	
Flow	100	lbf/in	
Compression Set ⁴			ISO 815
72°F, 70 hr	27	%	
73°F, 22 hr	12	%	
194°F, 70 hr	47	%	
257°F, 70 hr	68	%	
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 868
Shore A, 1 sec, Injection Molded	47		
Shore A, 5 sec, Injection Molded	45		
Shore A, 15 sec, Injection Molded	43		

Sarlink® TPE ME-1345N

Teknor Apex Company - Thermoplastic Elastomer

Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air ⁵			ISO 188
Across Flow : 230°F, 1008 hr	43	%	
Flow : 230°F, 1008 hr	5.3	%	
Across Flow : 100% Strain 230°F, 1008 hr	5.5	%	
Flow : 100% Strain 230°F, 1008 hr	6.6	%	
Across Flow : 257°F, 168 hr	69	%	
Flow : 257°F, 168 hr	11	%	
Across Flow : 100% Strain 257°F, 168 hr	21	%	
Flow : 100% Strain 257°F, 168 hr	13	%	
Change in Tensile Strain at Break in Air ⁵			ISO 188
Across Flow : 230°F, 1008 hr	5.5	%	
Flow : 230°F, 1008 hr	15	%	
Across Flow : 257°F, 168 hr	6.1	%	
Flow : 257°F, 168 hr	6.8	%	
Change in Shore Hardness in Air			ISO 188
Shore A, 230°F, 1008 hr ⁶	3.2		
Shore A, 230°F, 1008 hr ⁷	3.8		
Shore A, 230°F, 1008 hr ⁸	3.9		
Shore A, 257°F, 168 hr ⁶	1.6		
Shore A, 257°F, 168 hr ⁷	2.5		
Shore A, 257°F, 168 hr ⁸	2.7		
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	360 to 450	°F
Middle Temperature	370 to 460	°F
Front Temperature	380 to 470	°F
Nozzle Temperature	390 to 480	°F
Processing (Melt) Temp	390 to 480	°F
Mold Temperature	60 to 90	°F
Injection Pressure	200 to 800	psi
Injection Rate	Fast	
Back Pressure	25.0 to 100	psi
Screw Speed	50 to 100	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).

Sarlink® TPE ME-1345N

Teknor Apex Company - Thermoplastic Elastomer

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	360 to 450	°F
Cylinder Zone 2 Temp.	370 to 460	°F
Cylinder Zone 3 Temp.	380 to 470	°F
Cylinder Zone 4 Temp.	390 to 480	°F
Cylinder Zone 5 Temp.	390 to 480	°F
Die Temperature	390 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 1 sec

⁷ 5 sec

⁸ 15 sec