



Sarlink® TPE ME-2242D-01 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Sarlink ME-2242D-01 is a general purpose thermoplastic elastomer used in automotive applications, including exterior. Sarlink ME-2242D-01 is a low density, high hardness grade exhibiting superior chemical resistance. This grade can be processed by injection molding.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Abrasion Resistant • Anti-fogging • Bondability • Chemical Resistant • General Purpose • Good Adhesion • Good Color Stability • Good Colorability • Good Flow	• Good Moldability • Good Processability • Good Scratch Resistance • Good Tear Strength • Halogen Free • High Hardness • Low Density • Low Gloss • Low Temperature Impact Resistance	• Lubricated • Paintable • Pleasing Surface Appearance • Slip • UV Resistant • Wear Resistant • Without Fillers
Uses	• Automotive Applications • Automotive Exterior Parts • Automotive Exterior Trim	• Automotive Interior Parts • Automotive Interior Trim • Overmolding	• Rubber Replacement
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Translucent
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.916	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	5.0	g/10 min	ASTM D1238
Mechanical	Nominal Value	Unit	Test Method
Flexural Modulus	52400	psi	ISO 178
Flexural Stress ² (5.0% Strain)	1230	psi	ISO 178
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ³			ISO 37
Across Flow : 100% Strain	1060	psi	
Flow : 100% Strain	1400	psi	
Tensile Stress ³			ISO 37
Across Flow : Break	1160	psi	
Flow : Break	1500	psi	
Tensile Elongation ³			ISO 37
Across Flow : Break	530	%	
Flow : Break	440	%	
Tear Strength ⁴			ISO 34-1
Across Flow	444	lbf/in	
Flow	358	lbf/in	

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Elastomers	Nominal Value	Unit	Test Method
Compression Set ⁵			ISO 815
73°F, 22 hr	64	%	
158°F, 22 hr	80	%	
257°F, 70 hr	99	%	
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 868
Shore D, 1 sec, Injection Molded	45		
Shore D, 5 sec, Injection Molded	42		
Shore D, 15 sec, Injection Molded	40		
Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air ⁶			ISO 188
Across Flow : 212°F, 1000 hr	6.2	%	
Flow : 212°F, 1000 hr	5.0	%	
Across Flow : 100% Strain 212°F, 1000 hr	12	%	
Flow : 100% Strain 212°F, 1000 hr	11	%	
Change in Tensile Strain at Break in Air ⁶			ISO 188
Across Flow : 212°F, 1000 hr	-42	%	
Flow : 212°F, 1000 hr	-44	%	
Change in Shore Hardness in Air			ISO 188
Shore D, 212°F, 1000 hr ⁷	3.5		
Shore D, 212°F, 1000 hr ⁸	5.9		
Shore D, 212°F, 1000 hr ⁹	6.2		
Fill Analysis	Nominal Value	Unit	Test Method
Apparent Viscosity (392°F, 206 sec ⁻¹)	451	Pa·s	ASTM D3835

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	420 to 460	°F
Middle Temperature	420 to 460	°F
Front Temperature	420 to 460	°F
Nozzle Temperature	420 to 460	°F
Processing (Melt) Temp	420 to 460	°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).

Notes

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

² Yield strength

³ Type 1, 20 in/min

⁴ Method Ba, Angle (Unnicked), 20 in/min