



Sarlink® TPE ME-2240DB (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

The Sarlink ME-2200 Series is a general purpose thermoplastic elastomer series, available in BLK, designed for automotive exterior molded applications. Sarlink ME-2240DB is a high hardness, low density, UV stabilized grade suitable for injection molding.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Good Adhesion • Good Processability • High Hardness	• Light Stabilized • Low Density • Low Flow • Low Specific Gravity	• Lubricated • Sunlight Resistant • UV Resistant
Uses	• Automotive Applications • Automotive Exterior Parts	• Automotive Exterior Trim • Rubber Replacement	
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.928	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	12	g/10 min	ASTM D1238
Molding Shrinkage - Flow ² (48 hr, Injection Molded)	0.012	in/in	ASTM D955
Molding Shrinkage - Across Flow ² (48 hr, Injection Molded)	0.012	in/in	ASTM D955
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ³			ISO 37
Across Flow : 100% Strain	889	psi	
Flow : 100% Strain	1060	psi	
Tensile Stress ³			ISO 37
Across Flow : Break	2160	psi	
Flow : Break	1940	psi	
Tensile Elongation ³			ISO 37
Across Flow : Break	720	%	
Flow : Break	630	%	
Tear Strength ⁴			ISO 34-1
Across Flow	380	lbf/in	
Flow	340	lbf/in	
Compression Set ⁵			ISO 815
73°F, 22 hr	37	%	
158°F, 22 hr	56	%	
194°F, 70 hr	68	%	
257°F, 70 hr	100	%	
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 868
Shore D, 1 sec, Injection Molded	44		
Shore D, 5 sec, Injection Molded	39		
Shore D, 15 sec, Injection Molded	38		

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Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air ⁶			ISO 188
Across Flow : 230°F, 1008 hr	-1.3	%	
Flow : 230°F, 1008 hr	-3.0	%	
Across Flow : 100% Strain 230°F, 1008 hr	13	%	
Flow : 100% Strain 230°F, 1008 hr	19	%	
Across Flow : 257°F, 168 hr	-2.0	%	
Flow : 257°F, 168 hr	-9.0	%	
Across Flow : 100% Strain 257°F, 168 hr	11	%	
Flow : 100% Strain 257°F, 168 hr	18	%	
Change in Tensile Strain at Break in Air ⁶			ISO 188
Across Flow : 230°F, 1008 hr	-3.6	%	
Flow : 230°F, 1008 hr	-10	%	
Across Flow : 257°F, 168 hr	-1.0	%	
Flow : 257°F, 168 hr	-17	%	
Change in Shore Hardness in Air			ISO 188
Shore D, 230°F, 1008 hr ⁷	1.7		
Shore D, 230°F, 1008 hr ⁸	1.0		
Shore D, 230°F, 1008 hr ⁹	1.9		
Shore D, 257°F, 168 hr ⁸	-0.90		
Shore D, 257°F, 168 hr ⁷	0.30		
Shore D, 257°F, 168 hr ⁹	0.70		
Fill Analysis	Nominal Value	Unit	Test Method
Apparent Viscosity (392°F, 206 sec ⁻¹)	203	Pa·s	ASTM D3835
Additional Information	Nominal Value	Unit	Test Method
Xenon Weatherometer			SAE J2527
Delta E - 1250 kJ	0.280		
Delta E - 2500 kJ	0.250		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	390 to 410	°F
Middle Temperature	400 to 420	°F
Front Temperature	410 to 430	°F
Nozzle Temperature	420 to 440	°F
Processing (Melt) Temp	420 to 440	°F
Mold Temperature	95 to 150	°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

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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 Plaque dimensions: 100mm x 100mm x 2.37mm
- ³ Type 1, 20 in/min
- ⁴ Method Ba, Angle (Unnicked), 20 in/min
- ⁵ Type A
- ⁶ Type 1
- ⁷ 5 sec
- ⁸ 1 sec
- ⁹ 15 sec