+135-3858-6433 (GuangDong)
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TEKNOR APEX

Sarlink® TPE ME-2160B

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Sarlink TPE ME-2100 Series are general purpose thermoplastic elastomers designed for exterior automotive molding applications. Sarlink TPE ME-2160B is a medium hardness, high density, filled grade having good UV resistance.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Filled • Good Adhesion • Good Flexibility • Good Flow	• Good Mold Release • Good Moldability • Good Processability • Good Toughness • High Density	• High Specific Gravity • Medium Hardness • 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	1.18	g/cm³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	10	g/10 min	ASTM D1238
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [2]			ISO 37
Across Flow : 100% Strain	190	psi	
Flow : 100% Strain	225	psi	
Tensile Stress [2]			ISO 37
Across Flow : Break	769	psi	
Flow : Break	682	psi	
Tensile Elongation [2]			ISO 37
Across Flow : Break	790	%	
Flow : Break	710	%	
Tear Strength [3]			ISO 34-1
Across Flow	115	lbf/in	
Flow	116	lbf/in	
Compression Set [4]			ISO 815
73°F, 22 hr	25	%	
158°F, 22 hr	43	%	
194°F, 70 hr	76	%	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Shore Hardness			ISO 868
Shore A, 1 sec, Injection Molded	62		
Shore A, 5 sec, Injection Molded	60		
Shore A, 15 sec, Injection Molded	58		

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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	-1.3	%	
Flow : 230°F, 1008 hr	3.2	%	
Across Flow : 100% Strain 230°F, 1008 hr	5.6	%	
Flow : 100% Strain 230°F, 1008 hr	13	%	
Across Flow : 257°F, 168 hr	1.3	%	
Flow : 257°F, 168 hr	5.7	%	
Across Flow : 100% Strain 257°F, 168 hr	8.9	%	
Flow : 100% Strain 257°F, 168 hr	17	%	
Change in Tensile Strain at Break in Air [5]			ISO 188
Across Flow : 230°F, 1008 hr	8.4	%	
Flow : 230°F, 1008 hr	11	%	
Across Flow : 257°F, 168 hr	10	%	
Flow : 257°F, 168 hr	14	%	
Change in Shore Hardness in Air			ISO 188
Shore A, 230°F, 1008 hr [6]	4.1		
Shore A, 230°F, 1008 hr [7]	3.7		
Shore A, 230°F, 1008 hr [8]	4.0		
Shore A, 257°F, 168 hr [6]	4.0		
Shore A, 257°F, 168 hr [7]	3.6		
Shore A, 257°F, 168 hr [8]	3.6		

Fill Analysis	Nominal Value	Unit	Test Method
Apparent Viscosity (392°F, 206 sec^-1)	130	Pa·s	ISO 11443

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	Moderate-Fast	
Back Pressure	24.9 to 125	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 176°F (80°C)

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