+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

TEKNOR APEX

Sarlink® TPE ML-1165B BLK

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Sarlink ML-1100 is a general purpose thermoplastic elastomer series, available in NAT and BLK designed for automotive interior applications. Sarlink ML-1165B BLK is a low hardness, high density, filled grade suitable for injection molding.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Filled • Good Adhesion • Good Flexibility	• Good Moldability • Good Tear Strength • Good Toughness • High Density	• High Specific Gravity • Low Flow • Low Hardness • Resilient
Uses	• Automotive Applications • Automotive Interior Parts • Flexible Grips	• General Purpose • Grommets • Knobs	• Rubber Replacement • Soft Touch Applications
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) (190°C/2.16 kg)	1.0	g/10 min	ASTM D1238
Elastomers	**Nominal Value**	**Unit**	**Test Method**
Tensile Stress [2]			ISO 37
Across Flow : 100% Strain	310	psi	
Flow : 100% Strain	276	psi	
Tensile Stress [2]			ISO 37
Across Flow : Break	928	psi	
Flow : Break	957	psi	
Tensile Elongation [2]			ISO 37
Across Flow : Break	830	%	
Flow : Break	820	%	
Tear Strength [3]			ISO 34-1
Across Flow	143	lbf/in	
Flow	137	lbf/in	
Compression Set [4]			ISO 815
73°F, 72 hr	21	%	
158°F, 22 hr	31	%	
212°F, 22 hr	55	%	
248°F, 22 hr	70	%	
Hardness	**Nominal Value**	**Unit**	**Test Method**
Shore Hardness (Shore A, Instant, Injection Molded)	67		ISO 868

+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
+852-6957-5415 (HongKong)

Sarlink® TPE ML-1165B BLK

Teknor Apex Company - Thermoplastic Elastomer

Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air [5]			ISO 188
Across Flow : 248°F, 1000 hr	13	%	
Flow : 248°F, 1000 hr	5.8	%	
Across Flow : 100% Strain 248°F, 1000 hr	13	%	
Flow : 100% Strain 248°F, 1000 hr	18	%	
Change in Tensile Strain at Break in Air [5]			ISO 188
Across Flow : 248°F, 1000 hr	-0.040	%	
Flow : 248°F, 1000 hr	-7.1	%	
Change in Shore Hardness in Air [6]			ISO 188
Shore A, 248°F, 1000 hr	-0.20		

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	360 to 400	°F
Middle Temperature	380 to 440	°F
Front Temperature	400 to 460	°F
Nozzle Temperature	400 to 460	°F
Processing (Melt) Temp	400 to 460	°F
Mold Temperature	70 to 100	°F
Injection Pressure	200 to 1000	psi
Injection Rate	Moderate-Fast	
Back Pressure	25.0 to 50.0	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).

Notes

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

[2] Type 2, 20 in/min

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

[4] Type A

[5] Type 2

[6] Instant