



Sarlink® TPE ML-1655B BLK (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Sarlink ML-1600 is a general purpose thermoplastic elastomer series, available in NAT and BLK designed for automotive interior applications. Sarlink ML-1655B BLK is a low hardness, low density 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 • Low Hardness	• Low Specific Gravity • 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	0.990	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	8.4	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ISO 37
Across Flow : 100% Strain	183	psi	
Flow : 100% Strain	232	psi	
Tensile Stress ²			ISO 37
Across Flow : Break	1190	psi	
Flow : Break	986	psi	
Tensile Elongation ²			ISO 37
Across Flow : Break	930	%	
Flow : Break	820	%	
Tear Strength ³			ISO 34-1
Across Flow	113	lbf/in	
Flow	123	lbf/in	
Compression Set ⁴			ISO 815
73°F, 72 hr	19	%	
158°F, 22 hr	36	%	
212°F, 22 hr	65	%	
248°F, 22 hr	77	%	
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore A, Instant, Injection Molded)	57		ISO 868

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Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air ⁵			ISO 188
Across Flow : 248°F, 1000 hr	11	%	
Flow : 248°F, 1000 hr	12	%	
Across Flow : 100% Strain 248°F, 1000 hr	16	%	
Flow : 100% Strain 248°F, 1000 hr	15	%	
Change in Tensile Strain at Break in Air ⁵			ISO 188
Across Flow : 248°F, 1000 hr	3.0	%	
Flow : 248°F, 1000 hr	16	%	
Change in Shore Hardness in Air ⁶			ISO 188
Shore A, 248°F, 1000 hr	3.0		

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