



Telcar® TL-1947A-55NT BLK 222 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Telcar TL-1949A-55NT BLK 222 is a high performance thermoplastic elastomer designed for adhesion to polystyrene. TL-1949A-55NT BLK 222 is a medium hardness, low density grade that is suitable for injection molding.

General

Material Status	• Preliminary Data		
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	
Features	• Light Stabilized • Low Density • Low Specific Gravity	• Medium Flow • Medium Hardness • Sunlight Resistant	• Without Fillers
Uses	• Closures • Footwear	• Grommets • Rubber Replacement	
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	0.930		ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	4.5	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	212	psi	
Flow : 100% Strain	282	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	344	psi	
Flow : 300% Strain	425	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	727	psi	
Flow : Break	499	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	720	%	
Flow : Break	490	%	
Tear Strength ²			ASTM D624
Across Flow	174	lbf/in	
Flow	128	lbf/in	
Compression Set ³			ASTM D395B
73°F, 22 hr	14	%	
158°F, 22 hr	96	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	57		
Shore A, 5 sec, Injection Molded	53		

Telcar® TL-1947A-55NT BLK 222 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

Processing Information		
Injection	Nominal Value	Unit
Rear Temperature	340 to 380	°F
Middle Temperature	350 to 390	°F
Front Temperature	360 to 400	°F
Nozzle Temperature	370 to 410	°F
Processing (Melt) Temp	370 to 410	°F
Mold Temperature	77 to 150	°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 Die C, 20 in/min

³ Type 1