



Telcar® TL-3954-62

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Telcar TL-3954-62 is a general purpose thermoplastic elastomer designed for a variety of wire and cable applications, including cable jacketing and cable insulation. Telcar TL-3954-62 is a high density, medium hardness, RoHS compliant grade that is suitable for injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Filled • General Purpose • Good Mold Release	• Good Moldability • Good Processability • High Density	• High Specific Gravity • Low Flow • Medium Hardness
Uses	• Appliance Wire Insulation • Appliance Wire Jacketing • Cable Jacketing • Connectors	• Construction Applications • Flexible Cord Jacketing • Industrial Applications • Industrial Cable Insulation	• Terminal Cable Jacketing • Underground Power Cable • Wire & Cable Applications • Wire Jacketing
Agency Ratings	• UL 94		
RoHS Compliance	• RoHS Compliant		
UL File Number	• QMFZ2.E54709		
Appearance	• Colors Available	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.18		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	1.5	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	223	psi	
Flow : 100% Strain	301	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	351	psi	
Flow : 300% Strain	433	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	1130	psi	
Flow : Break	892	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	730	%	
Flow : Break	670	%	
Tear Strength ²			ASTM D624
Across Flow	157	lbf/in	
Flow	149	lbf/in	
Compression Set ³			ASTM D395B
73°F, 22 hr	26	%	
158°F, 22 hr	46	%	

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Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	62		
Shore A, 5 sec, Injection Molded	60		
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	< -76.0	°F	ASTM D746

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	
Extrusion	Nominal Value	Unit	
Cylinder Zone 1 Temp.	330 to 370	°F	
Cylinder Zone 2 Temp.	340 to 380	°F	
Cylinder Zone 3 Temp.	350 to 390	°F	
Cylinder Zone 4 Temp.	350 to 390	°F	
Cylinder Zone 5 Temp.	360 to 400	°F	
Die Temperature	374 to 410	°F	
Extrusion Notes			
Screw Speed: 30 to 100 rpm			

Notes

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

² Die C, 20 in/min

³ Type 1