



Telcar® TL-97-T0207G-87UV

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Telcar TL-97-T0207G-87UV is a high performance flame retardant thermoplastic elastomer designed for electrical applications including fiber optics.
Telcar TL-97-T0207G-87UV is a high hardness, medium density, UV stabilized grade that is suitable for extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Filled • Flame Retardant • Good Adhesion	• Good Processability • Good Tear Strength • Good Toughness • High Hardness	• Light Stabilized • Low Flow • Medium Density • Slip
Uses	• Fiber Optic Cable	• Industrial Applications	• Rubber Replacement
RoHS Compliance	• RoHS Compliant		
Appearance	• Colors Available	• Natural Color	• Opaque
Forms	• Pellets		
Processing Method	• Extrusion		

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.05	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	1.2	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ISO 37
Across Flow : 100% Strain	759	psi	
Flow : 100% Strain	1030	psi	
Tensile Stress			ISO 37
Across Flow : Break	1520	psi	
Flow : Break	1130	psi	
Tensile Elongation			ISO 37
Across Flow : Break	820	%	
Flow : Break	370	%	
Tear Strength			ISO 34-1
Across Flow	349	lbf/in	
Flow	341	lbf/in	
Compression Set			ISO 815
73°F, 22 hr	49	%	
158°F, 22 hr	88	%	
194°F, 70 hr	94	%	
Hardness	Nominal Value	Unit	Test Method
Shore Hardness			ISO 868
Shore D, 1 sec	49		
Shore D, 5 sec	42		
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	< -67.0	°F	ASTM D746

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Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air - Across Flow (257°F, 168 hr)	-9.5	%	ISO 188
Change in Tensile Strain at Break in Air - Across Flow 257°F, 168 hr	-5.5	%	ISO 188
Change in Shore Hardness in Air Shore D, 257°F, 168 hr	4.3		ISO 188
Fill Analysis	Nominal Value	Unit	Test Method
Apparent Viscosity (392°F, 206 sec ⁻¹)	549	Pa·s	ASTM D3835

Processing Information

Extrusion	Nominal Value	Unit
Cylinder Zone 1 Temp.	330 to 390	°F
Cylinder Zone 2 Temp.	340 to 400	°F
Cylinder Zone 3 Temp.	350 to 410	°F
Cylinder Zone 4 Temp.	360 to 420	°F
Cylinder Zone 5 Temp.	360 to 420	°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.