

Telcar® TL-3260R

Teknor Apex Company - Thermoplastic Elastomer

Thursday, June 29, 2017

General Information

Product Description

Telcar TL-3260R is a general purpose thermoplastic elastomer designed for industrial and electrical applications, including fiber optic cable jacketing, requiring flexibility over a wide temperature range. Telcar TL-3260R is a high hardness, high density grade that is RoHS compliant. This grade is UL 94V-0 rated and is suitable for injection molding and extrusion.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Bondability • Chemical Resistant • Filled • Flame Retardant	• Good Adhesion • Good Processability • Good Tear Strength • Good Toughness	• Halogenated • High Density • High Hardness • High Specific Gravity
Uses	• Building Wire Insulation • Fiber Optic Cable Jacketing • General Purpose	• Industrial Applications • Rubber Replacement • Wire & Cable Applications	• Wire Jacketing
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.23		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	0.86	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ASTM D412
Across Flow : 100% Strain	1040	psi	
Flow : 100% Strain	1550	psi	
Tensile Strength			ASTM D412
Across Flow : Break	1600	psi	
Flow : Break	1550	psi	
Tensile Elongation			ASTM D412
Across Flow : Break	660	%	
Flow : Break	240	%	
Tear Strength - Across Flow	457	lbf/in	ASTM D624
Compression Set			ASTM D395
73°F, 22 hr	47	%	
158°F, 22 hr	86	%	
194°F, 70 hr	97	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore D, 1 sec	56		
Shore D, 5 sec	57		
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	< -90.4	°F	ASTM D746

Revision Date: 12/15/2016

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Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air			ISO 188
230°F, 1008 hr	-0.30	%	
257°F, 168 hr	2.9	%	
Change in Tensile Strain at Break in Air			ISO 188
230°F, 1008 hr	-0.30	%	
257°F, 168 hr	2.9	%	
Change in Shore Hardness in Air (230°F, 1008 hr)	2.3		ISO 188
Electrical	Nominal Value	Unit	Test Method
Dielectric Strength	720	V/mil	ASTM D149
Dielectric Constant			ASTM D150
1 kHz	2.32		
1 MHz	2.33		
Dissipation Factor			ASTM D150
1 kHz	4.0E-4		
1 MHz	2.0E-4		
Flammability	Nominal Value	Unit	Test Method
Flame Rating (0.06 in)	V-0		UL 94
Oxygen Index	24	%	ASTM D2863
Fill Analysis	Nominal Value	Unit	Test Method
Apparent Viscosity (392°F, 206 sec ⁻¹)	701	Pa·s	ASTM D3835

Legal Statement

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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).		
Extrusion	Nominal Value	Unit
Drying Temperature	176	°F
Drying Time	2.0	hr
Cylinder Zone 1 Temp.	330 to 370	°F
Cylinder Zone 2 Temp.	340 to 380	°F

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Extrusion	Nominal Value	Unit
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.

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