



Telcar® TL-4129

Teknor Apex Company - Thermoplastic Elastomer

General Information

Product Description

Telcar TL-4129 is a low density thermoplastic elastomer designed for the industrial market. Telcar TL-4129 is a clear TPE that is UV stable 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 • Good Colorability • Good Melt Strength • Good Mold Release • Good Moldability	• Good Processability • Light Stabilized • Low Density • Low Flow • Low Specific Gravity	• Lubricated • Medium Hardness • Slip • Without Fillers
Uses	• General Purpose	• Industrial Applications	• Weatherstripping
RoHS Compliance	• RoHS Compliant		
Appearance	• Clear/Transparent	• Colors Available	• Natural Color
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	0.890		ASTM D792
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	4.0	g/10 min	ASTM D1238
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress ²			ASTM D412
Across Flow : 100% Strain	302	psi	
Flow : 100% Strain	425	psi	
Tensile Stress ²			ASTM D412
Across Flow : 300% Strain	502	psi	
Flow : 300% Strain	630	psi	
Tensile Strength ²			ASTM D412
Across Flow : Break	1390	psi	
Flow : Break	860	psi	
Tensile Elongation ²			ASTM D412
Across Flow : Break	710	%	
Flow : Break	490	%	
Tear Strength ²			ASTM D624
Across Flow	212	lbf/in	
Flow	172	lbf/in	
Compression Set ³			ASTM D395B
73°F, 22 hr	18	%	
158°F, 22 hr	87	%	
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness			ASTM D2240
Shore A, 1 sec, Injection Molded	65		
Shore A, 5 sec, Injection Molded	63		

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Processing Information

Injection	Nominal Value	Unit
Rear Temperature	390 to 410	°F
Middle Temperature	400 to 420	°F
Front Temperature	410 to 430	°F
Nozzle Temperature	420 to 440	°F
Processing (Melt) Temp	420 to 440	°F
Mold Temperature	95 to 150	°F
Injection Pressure	200 to 1000	psi
Injection Rate	Fast	
Back Pressure	25.0 to 125	psi
Screw Speed	50 to 120	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
Cylinder Zone 1 Temp.	380 to 400	°F
Cylinder Zone 2 Temp.	390 to 410	°F
Cylinder Zone 3 Temp.	400 to 420	°F
Cylinder Zone 4 Temp.	400 to 410	°F
Cylinder Zone 5 Temp.	410 to 430	°F
Die Temperature	420 to 440	°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