



Techsil Conductive Elastomer LTE-85

LTE-85 is a Shore A 75 durometer hardness ethylene propylene diene monomer (EPDM) elastomer filled with nickel coated graphite particles as the conductive and shielding media. This material has good shielding properties and conductivity and is recommended in applications exposed to NBC (Nuclear Biological Chemical) wash-downs with DS-2 and STB. LTE-85 has good sealing properties and is also resistant to steam due to its high impermeability elastomer base. LTE-85 has a shelf life of 5-10 years if stored in the absence of moisture, light and sulfur. LTE-85 exhibits good performance in moderately corrosive environments and has high physical strength and abrasion resistance. This material can be supplied as molded parts, die cut parts, select extruded profiles, or as standard sheet stock. Please contact Leader Tech for additional information regarding your specific application.

Elastomer:	EPDM
Filler Material:	Nickel Coated Graphite
Color:	Dark Grey (Custom colors available upon request)

Electrical Properties

Test Method

Volume Resistivity (ohm-cm) (as received)	Max.	.100	MIL-DTL-83528 (Para. 4.5.10)
Shielding Effectiveness (db)	Typical		MIL-DTL-83528 (Para. 4.5.12) MIL-STD-285
20 MHz		110	
100 MHz		110	
600 MHz		105	
2 GHz		105	
10 GHz		100	

Electrical Stability

After Heat Aging (ohm-cm)	Max.	.150	MIL-DTL-83528 (Para. 4.5.15)
After Break (ohm-cm)	Max.	N/A	MIL-DTL-83528 (Para. 4.5.9)
During Vibration (ohm-cm)	Max.	.150	MIL-DTL-83528 (Para. 4.5.13)
After Vibration (ohm-cm)		.100	
After Exposure to EMP (ohm-cm) (0.9 KAmper/Inch of Perimeter)	Max.	.150	MIL-DTL-83528 (Para. 4.5.16)

Physical Properties

Specific Gravity (+/-0.25)		2.2	ASTM D792 (MIL Para. 4.5.3)
Hardness (Shore A) (+/-7)		80	ASTM D2240 (MIL Para. 4.5.4)
Tensile Strength (PSI)	Min.	200	ASTM D412 (MIL Para. 4.5.6)
Elongation (%)	Min.	100	ASTM D412 (MIL Para. 4.5.6)
	Max.	400	
Tear Strength (PPI)	Min.	60	ASTM D624 (MIL Para. 4.5.8)
Compression Set (%)	Max.	40	ASTM D395 (MIL Para. 4.5.7)
Upper Operating Temp. (°C)	Max.	+125	Maximum Continuous Use Temperature
Lower Operating Temp. (°C)	Min.	-40	ASTM D1329 (MIL Para. 4.5.14)
Compression Deflection (%)	Min.	3.0	ASTM D575 (MIL Para. 4.5.5)
Fluid Immersion		NS	MIL-DTL-83528 (Para. 4.5.17)

SUR=Survivable NS=Not Survivable



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Performance of conductive elastomers vary from one application to another. Leader Tech, Inc. cannot guarantee that the above specifications will be met in your specific application. If you need assistance in testing your application, please do not hesitate to contact Leader Tech for further information.