

Techsil Conductive Elastomer LTE-95

LTE-95 is a Shore A 70 durometer hardness ethylene propylene diene monomer (EPDM) elastomer filled with silver plated nickel particles as the conductive and shielding media. This material has good shielding properties, conductivity and EMP resistance, and is recommended for applications exposed to NBC (Nuclear Biological Chemical) wash-downs with DS-2 and STB. LTE-95 has good sealing properties and is also resistant to steam due to its highly impermeable elastomer base. LTE-95 has a shelf life of 5-10 years if stored in the absence of moisture, light and sulfur. LTE-95 exhibits good performance in non-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:	Silver Plated Nickel
Color:	Tan (Custom colors available upon request)

Electrical Properties

Test Method

Property	Max.	Typical	Test Method
Volume Resistivity (ohm-cm) (as received)	.100		MIL-DTL-83528 (Para. 4.5.10)
Shielding Effectiveness (db)			
20 MHz		90	MIL-DTL-83528 (Para. 4.5.12) MIL-STD-285
100 MHz		110	
600 MHz		100	
2 GHz		100	
10 GHz		100	

Electrical Stability

Property	Max.	Test Method
After Heat Aging (ohm-cm)	.025	MIL-DTL-83528 (Para. 4.5.15)
After Break (ohm-cm)	N/A	MIL-DTL-83528 (Para. 4.5.9)
During Vibration (ohm-cm)	.020	MIL-DTL-83528 (Para. 4.5.13)
After Vibration (ohm-cm)	.010	
After Exposure to EMP (ohm-cm) (0.9 KAmper/inch of Perimeter)	.015	MIL-DTL-83528 (Para. 4.5.16)

Physical Properties

Property	Min.	Max.	Test Method
Specific Gravity (+/-0.25)	3.5		ASTM D792 (MIL Para. 4.5.3)
Hardness (Shore A) (+/-7)	80		ASTM D2240 (MIL Para. 4.5.4)
Tensile Strength (PSI)	200		ASTM D412 (MIL Para. 4.5.6)
Elongation (%)	100		ASTM D412 (MIL Para. 4.5.6)
	400		
Tear Strength (PPI)	65		ASTM D624 (MIL Para. 4.5.8)
Compression Set (%)	40		ASTM D395 (MIL Para. 4.5.7)
Upper Operating Temp. (°C)	+125		Maximum Continuous Use Temperature
Lower Operating Temp. (°C)	-40		ASTM D1329 (MIL Para. 4.5.14)
Compression Deflection (%)	3.0		ASTM D575 (MIL Para. 4.5.5)
Fluid Immersion	NS		MIL-DTL-83528 (Para. 4.5.17)

SUR=Survivable NS=Not Survivable