

Techsil Conductive Elastomer LTE-70

LTE-70 is a Shore A 75 durometer hardness ethylene propylene diene monomer (EPDM) elastomer filled with silver plated aluminum particles as the conductive and shielding media. This material has excellent shielding properties and conductivity and is recommended in applications exposed to NBC (Nuclear Biological Chemical) wash-downs with DS-2 and STB. LTE-70 has good sealing properties and is also resistant to steam due to its high impermeability elastomer base. LTE-70 has a shelf life of 5-10 years if stored in the absence of moisture, light and sulfur. LTE-70 exhibits excellent 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:	Silver Plated Aluminum
Color:	Tan (Custom colors available upon request)

Electrical Properties

Test Method

Property	Max.	Typical	Test Method
Volume Resistivity (ohm-cm) (as received)	Max.	.010	MIL-DTL-83528 (Para. 4.5.10)
Shielding Effectiveness (db)	Typical	95	MIL-DTL-83528 (Para. 4.5.12) MIL-STD-285
20 MHz			
100 MHz			
600 MHz			
2 GHz			
10 GHz			

Electrical Stability

After Heat Aging (ohm-cm)	Max.	.020	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.	.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)	Max.	.020	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)		75	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.	50	ASTM D624 (MIL Para. 4.5.8)
Compression Set (%)	Max.	50	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.	2.5	ASTM D575 (MIL Para. 4.5.5)
Fluid Immersion		NS	MIL-DTL-83528 (Para. 4.5.17)

SUR=Survivable NS=Not Survivable