

Techsil Conductive Elastomer LTE-90

LTE-90 is a Shore A 70 durometer hardness fluorosilicone elastomer filled with nickel coated graphite particles as the conductive and shielding media. This material has good shielding properties and conductivity and is tested IAW MIL-DTL-83528, the DoD standard for conductive elastomer shielding gasket material. This material has excellent sealing properties at temperature extremes, is ozone resistant and has a long shelf life if stored in the absence of moisture, light and sulfur. LTE-90 provides good corrosion resistance with aluminum and other substrates. This unique material is recommended for applications that require low and high temperature performance in contact with jet and automotive fuels, many solvents, and engine oils. This material can be supplied as molded parts, extruded shapes, die cut parts, or as standard sheet stock. Please contact Leader Tech for additional information regarding your specific application.

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

Electrical Properties

			Test Method
Volume Resistivity (ohm-cm) (as supplied)	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		119	
100 MHz		127	
600 MHz		126	
2 GHz		143	
10 GHz	126		

Electrical Stability

After Heat Aging (ohm-cm)	Max.	.200	MIL-DTL-83528 (Para. 4.5.15)
After Break (ohm-cm)	Max.	.200	MIL-DTL-83528 (Para. 4.5.9)
During Vibration (ohm-cm)	Max.	.200	MIL-DTL-83528 (Para. 4.5.13)
After Vibration (ohm-cm)		.100	
After Exposure to EMP (ohm-cm) (0.9 KAmp/inch of Perimeter)	Max.	.100	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)		70	ASTM D2240 (MIL Para. 4.5.4)
Tensile Strength (PSI)	Min.	150	ASTM D412 (MIL Para. 4.5.6)
Elongation (%)	Min.	60	ASTM D412 (MIL Para. 4.5.6)
	Max.	250	
Tear Strength (PPI)	Min.	40	ASTM D624 (MIL Para. 4.5.8)
Compression Set (%)	Max.	25	ASTM D395 (MIL Para. 4.5.7)
Upper Operating Temp. (°C)	Max.	+160	Maximum Continuous Use Temperature
Lower Operating Temp. (°C)	Min.	-55	ASTM D1329 (MIL Para. 4.5.14)
Compression Deflection (%)	Min.	3.5	ASTM D575 (MIL Para. 4.5.5)
Fluid Immersion		SUR	MIL-DTL-83528 (Para. 4.5.17)

SUR=Survivable NS=Not Survivable