

Chemical-Resistant Fluoroelastomer

Product Facts

- Excellent fuel resistance
- Low profile
- Rugged
- Lightweight



Applications

A high-performance elastomeric blend of polymers, TE -51 material offers excellent fluid resistance.

It is suitable for use in most areas of military vehicle harnessing. This material is available in the Uniboot range and other slimline boots and transitions. The standard color is black.

Installation

-51 molded parts will shrink on the application of heat above 135°C [275°F].

Recommended installation temperature is 150°C [302°F]

Operating Temperature Range

-55°C to 135°C
[-67°F to 275°F]

Available in:	Americas	Europe	Asia Pacific
	■	■	■

-51 (Continued)

Specifications/Approvals

Specification	TE
SC-X-15112 (U.S.)	RT-1321

Product Characteristics

		Specification Requirements	Test Method
Physical	Tensile strength	1500 psi (min.)	ASTM D 412
	Ultimate elongation	300% (min.)	ASTM D 412
	Specific gravity	1.6 (max.)	ASTM D 792
Thermal	Heat aging for 168 h at 121°C [250°F]	Tensile strength 1200 psi. (min.) Elongation 250% (min.)	RT-1321 Sec. 4.3.3 RT-1321 Sec. 4.3.3
	Heat shock for 4 h at 200°C [392°F]	No dripping, flowing, or cracking	RT-1321 Sec. 4.3.5
	Low-temperature flex for 4 h at -55°C [-67°F]	No cracking	RT-1321 Sec. 4.3.4
	Flammability (burn time)	120 seconds, 1 inch (max.)	ASTM D 635
Electrical	Dielectric strength	200 V/mil (min.)	ASTM D 149
Fluid resistance	Lubricating oil, diesel oil, water for 24 h at 25°C [77°F]	Tensile strength 1000 psi (min.) Elongation 225% (min.) Weight increase 10% (max.)	RT-1321 Sec. 4.3.3 and 4.3.7
	Gasoline for 24 h at 25°C [77°F]	Tensile strength 800 psi (min.) Elongation 225% (min.) Weight increase 25% (max.)	RT-1321 Sec. 4.3.3 and 4.3.7
	Isopropyl alcohol, cleaning fluid for 24 h at 25°C [77°F]	Tensile strength 1400 psi (min.) Elongation 225% (min.) Weight increase 10% (max.)	RT-1321 Sec. 4.3.3 and 4.3.7
	Hydraulic fluid for 24 h at 71°C [160°F]	Tensile strength 1000 psi (min.) Elongation 225% (min.) Weight increase 25% (max.)	RT-1321 Sec. 4.3.3 and 4.3.7