

**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.)  |
|                  | Ultimate elongation  | 300% (min.)  |
|                  | Specific gravity   | 1.6 (max.)   |
| Thermal          | Heat aging for 168 h at 121°C [250°F]                      | Tensile strength 1200 psi. (min.)<br>Elongation 250% (min.)                              |
|                  | Heat shock for 4 h at 200°C [392°F]                        | No dripping, flowing, or cracking  |
|                  | Low-temperature flex for 4 h at -55°C [-67°F]              | No cracking  |
|                  | Flammability (burn time)                                   | 120 seconds, 1 inch (max.)   |
| Electrical       | Dielectric strength  | 200 V/mil (min.)   |
| Fluid resistance | Lubricating oil, diesel oil, water for 24 h at 25°C [77°F] | Tensile strength 1000 psi (min.)<br>Elongation 225% (min.)<br>Weight increase 10% (max.) |
|                  | Gasoline for 24 h at 25°C [77°F]                           | Tensile strength 800 psi (min.)<br>Elongation 225% (min.)<br>Weight increase 25% (max.)  |
|                  | Isopropyl alcohol, cleaning fluid for 24 h at 25°C [77°F]  | Tensile strength 1400 psi (min.)<br>Elongation 225% (min.)<br>Weight increase 10% (max.) |
|                  | Hydraulic fluid for 24 h at 71°C [160°F]                   | Tensile strength 1000 psi (min.)<br>Elongation 225% (min.)<br>Weight increase 25% (max.) |