

-71

Semirigid Modified Polyolefin

Product Facts

- Flexible
- Flame-retardant



Applications

TE -71 material is a flexible, flame-retardant polyolefin suitable for use in general harnessing applications. The material is very flexible and offers a good balance of fluid and heat resistance. If Uniboot molded parts are required, -71 should be chosen as a replacement for -4. The standard color is black.

Installation

-71 molded parts will shrink on the application of heat above 125°C [257°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 |
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-71 (Continued)

Specifications/Approvals

| Military | TE |
|------------------------|---------|
| SAE-AS81765/1, Type II | RT-1316 |

Product Characteristics

| | | Specification Requirements | Test Method |
|------------------|---|--|--|
| Physical | Tensile strength | 10 MPa (min.) | ASTM D 412 |
| | Ultimate elongation | 250% (min.) | ASTM D 412 |
| | Specific gravity | 1.40 (max.) | ASTM D 792 |
| Thermal | Heat aging for 168 hr at 175°C [347°F] | Ultimate elongation 200% (min.) | ASTM D 412 |
| | Heat shock for 4 h at 250°C [482°F] | No dripping, cracking, or flowing | ASTM D 2671 |
| | Low-temperature flex for 4 h at -55°C [-67°F] | No cracking during mandrel bend | ASTM D 2671 |
| | Flammability (burn time) | 90 s (max.) | ASTM D 635 |
| Electrical | Electric strength | 8 MV/m | ASTM D 149 |
| Water absorption | — | 0.5% (max.) | ASTM D 570 |
| Fluid resistance | Aviation fuel JP-4 (MIL-T-5624) | Tensile strength 5 MPa (min.) Ultimate elongation 200% (min.) | ASTM D 412 after immersion for 24 h at 25°C [77°F] |
| | Lubricating oil O-149 (MIL-L-7808) | Tensile strength 5 MPa (min.) Ultimate elongation 200% (min.) | ASTM D 412 after immersion for 24 h at 25°C [77°F] |
| | Hydraulic fluid (MIL-H-5606) | Tensile strength 5 MPa (min.) Ultimate elongation 200% (min.) | ASTM D 412 after immersion for 24 h at 25°C [77°F] |
| | Skydrol® 500 | Tensile strength 5 MPa (min.) Ultimate elongation 200% (min.) | ASTM D 412 after immersion for 24 h at 25°C [77°F] |