



OnFlex™ S EF 70A-3S1975

Thermoplastic Elastomer

Key Characteristics

Product Description

OnFlex™-S EF thermoplastic elastomer compounds are based on hydrogenated styrenic block copolymers. This range of compounds are formulated to deliver good mechanical properties together with excellent processability, in addition to typical OnFlex™-S properties such as a wide hardness range, low compression set, good colourability and a wide temperature operating range. OnFlex™-S EF compounds are semi-filled, making them opaque and with a medium density.

General

| | | | |
|-----------------------|---|--|---------------------------|
| Material Status | • Commercial: Active | | |
| Regional Availability | • Africa & Middle East • Asia Pacific | • Europe • Latin America | • North America |
| Features | • High Flow | | |
| Uses | • Appliances • Automotive Applications | • Consumer Applications • General Purpose | • Industrial Applications |
| RoHS Compliance | • RoHS Compliant | | |
| Forms | • Pellets | | |
| Processing Method | • Injection Molding | | |

Technical Properties ¹

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|------------------------------|--|--|-------------|
| Density | 0.980 g/cm ³ | 0.980 g/cm ³ | ISO 1183 |
| Elastomers | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Stress (100% Strain) | 348 psi | 2.40 MPa | ISO 37 |
| Tensile Stress (300% Strain) | 522 psi | 3.60 MPa | ISO 37 |
| Tensile Stress (Break) | 1280 psi | 8.80 MPa | ISO 37 |
| Tensile Elongation (Break) | 610 % | 610 % | ISO 37 |
| Tear Strength | 191 lbf/in | 33.4 kN/m | ISO 34-1 |
| Compression Set | | | ISO 815 |
| 73°F (23°C), 72 hr | 13 % | 13 % | |
| 158°F (70°C), 22 hr | 60 % | 60 % | |
| 212°F (100°C), 22 hr | 92 % | 92 % | |
| Hardness | Typical Value (English) | Typical Value (SI) | Test Method |
| Shore Hardness (Shore A) | 70 | 70 | ISO 868 |
| Additional Information | Typical Value (English) | Typical Value (SI) | |
| Generic Material Type | Styrenic Thermoplastic Elastomer (TES) | Styrenic Thermoplastic Elastomer (TES) | |

Properties are measured using injection molded plaques.

Processing Information

| Injection | Typical Value (English) | Typical Value (SI) |
|------------------------|-------------------------|--------------------|
| Processing (Melt) Temp | 356 to 428 °F | 180 to 220 °C |
| Mold Temperature | 86 to 140 °F | 30 to 60 °C |
| Injection Rate | Fast | Fast |

Notes

¹ Typical values are not to be construed as specifications.