



OnFlex™ S KG 70A-3S2019

Thermoplastic Elastomer

Key Characteristics

Product Description

OnFlex™-S KG thermoplastic elastomer compounds are based on hydrogenated styrenic block copolymers. This range of compounds are specially compatibilized to provide excellent adhesion to polyamide polymers including PA6, PA6.6, PA11 and PA12. OnFlex™-S KG can be processed by 2K molding or overmolding, insert molding or co-extrusion. In addition to this, OnFlex™-S KG compounds are formulated to provide good processability and a good cost/performance ratio, a wide hardness range, good colourability and good mechanical properties.

General

| | | | |
|-----------------------|--|--|---------------------|
| Material Status | • Commercial: Active | | |
| Regional Availability | • Africa & Middle East • Asia Pacific | • Europe • Latin America | • North America |
| Features | • General Purpose | • Good Adhesion | |
| Uses | • Automotive Applications • Consumer Applications | • Industrial Applications • Overmolding | • Power/Other Tools |
| RoHS Compliance | • RoHS Compliant | | |
| Forms | • Pellets | | |
| Processing Method | • Coextrusion | • Multi Injection Molding | |

Technical Properties ¹

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|------------------------------|--|--|-------------|
| Density | 1.13 g/cm ³ | 1.13 g/cm ³ | ISO 1183 |
| Elastomers | Typical Value (English) | Typical Value (SI) | Test Method |
| Tensile Stress (100% Strain) | 392 psi | 2.70 MPa | ISO 37 |
| Tensile Stress (Break) | 566 psi | 3.90 MPa | ISO 37 |
| Tensile Elongation (Break) | 260 % | 260 % | ISO 37 |
| Tear Strength | 137 lbf/in | 24.0 kN/m | ISO 34-1 |
| Compression Set | | | ISO 815 |
| 73°F (23°C), 72 hr | 32 % | 32 % | |
| 158°F (70°C), 22 hr | 63 % | 63 % | |
| 212°F (100°C), 22 hr | 85 % | 85 % | |
| 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) |
|------------------------|-------------------------|--------------------|
| Drying Temperature | 212 °F | 100 °C |
| Drying Time | 2.0 hr | 2.0 hr |
| Processing (Melt) Temp | 392 to 500 °F | 200 to 260 °C |
| Mold Temperature | 86 to 122 °F | 30 to 50 °C |
| Injection Rate | Moderate | Moderate |