OnFlex™ S EF 40A-3S1964

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/cm³	0.980 g/cm³	ISO 1183
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress (100% Strain)	174 psi	1.20 MPa	ISO 37
Tensile Stress (300% Strain)	276 psi	1.90 MPa	ISO 37
Tensile Stress (Break)	754 psi	5.20 MPa	ISO 37
Tensile Elongation (Break)	670 %	670 %	ISO 37
Tear Strength	120 lbf/in	21.1 kN/m	ISO 34-1
Compression Set			ISO 815
73°F (23°C), 72 hr	15 %	15 %	
158°F (70°C), 22 hr	63 %	63 %	
212°F (100°C), 22 hr	95 %	95 %	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore A, 10 sec)	40	40	ISO 48-4
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.

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