OnFlex™ S EH 50A-3S7002

Thermoplastic Elastomer

Key Characteristics

Product Description

OnFlex™ S EH thermoplastic elastomer compounds are based on hydrogenated styrenic block copolymers. This range of compounds are formulated to deliver a great cost/performance ratio in addition to typical OnFlex™ S properties such as a wide hardness range, good mechanical properties, good processability, good colourability and a wide temperature operating range. OnFlex™ S EH compounds are filled, and are therefore opaque and have a moderately high density.

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose		
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	1.20 g/cm³	1.20 g/cm³	ISO 1183
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress (100% Strain)	218 psi	1.50 MPa	ISO 37
Tensile Stress (300% Strain)	319 psi	2.20 MPa	ISO 37
Tensile Stress (Break)	580 psi	4.00 MPa	ISO 37
Tensile Elongation (Break)	680 %	680 %	ISO 37
Tear Strength	108 lbf/in	19.0 kN/m	ISO 34-1
Compression Set			ISO 815
73°F (23°C), 72 hr	21 %	21 %	
158°F (70°C), 22 hr	43 %	43 %	
212°F (100°C), 22 hr	74 %	74 %	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore A, 10 sec)	50	50	ISO 48-4
Additional Information	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Fogging (212°F (100°C))	0.90 mg	0.90 mg	DIN 75201B
Generic Material Type	Styrenic Thermoplastic Elastomer (TES)	Styrenic Thermoplastic Elastomer (TES)	
Odor Rating	2.50	2.50	VDA 270

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

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Notes

[1] Typical values are not to be construed as specifications.

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