OnFlex™ S EH 80A-3S7005

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	• UV Resistant	
Uses	• Appliances • Automotive 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
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Abrasion Loss	311 mm³	311 mm³	DIN 53516
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress (100% Strain)	508 psi	3.50 MPa	ISO 37
Tensile Stress (300% Strain)	653 psi	4.50 MPa	ISO 37
Tensile Stress (Break)	1020 psi	7.00 MPa	ISO 37
Tensile Elongation (Break)	500 %	500 %	ISO 37
Tear Strength	188 lbf/in	33.0 kN/m	ISO 34-1
Compression Set			ISO 815
73°F (23°C), 72 hr	39 %	39 %	
158°F (70°C), 22 hr	70 %	70 %	
212°F (100°C), 22 hr	88 %	88 %	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore A, 10 sec)	80	80	ISO 48-4
Flammability	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Glow Wire Flammability Index			IEC 60695-2-12
0.08 in (2.0 mm)	1290 °F	700 °C	
Additional Information	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Fogging (212°F (100°C))	1.5 mg	1.5 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.

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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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