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)	80	80	ISO 868
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	
Fogging (212°F (100°C))	1.5 mg	1.5 mg	DIN 75201B
Additional Information	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
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

Notes

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

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