OnFlex™ S KA 40A-3S1767

Thermoplastic Elastomer

Key Characteristics

Product Description
OnFlex™-S KA thermoplastic elastomer compounds are based on hydrogenated styrenic block copolymers. This range of compounds are specially compatabilized to provide excellent adhesion to polyamide polymers including PA6, PA6.6, PA11 and PA12. OnFlex™-S KA can be processed by 2K molding or overmolding, insert molding or co-extrusion. In addition to this, OnFlex™-S KA compounds are formulated to provide excellent compression set performance, even at elevated temperatures, a wide hardness range, good colourability and surface appearance, good mechanical properties and excellent UV resistance.

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Adhesion	• High Heat Resistance	• UV Resistant
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	1.09 g/cm³	1.09 g/cm³	ISO 1183
Molding Shrinkage [2]			Internal Method
Across Flow : 72 hr, 0.0787 in (2.00 mm)	0.90 %	0.90 %	
Flow : 72 hr, 0.0787 in (2.00 mm)	2.9 %	2.9 %	
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress (100% Strain)	145 psi	1.00 MPa	ISO 37
Tensile Stress (300% Strain)	334 psi	2.30 MPa	ISO 37
Tensile Stress (Break)	435 psi	3.00 MPa	ISO 37
Tensile Elongation (Break)	410 %	410 %	ISO 37
Tear Strength	99.4 lbf/in	17.4 kN/m	ISO 34-1
Compression Set			ISO 815
73°F (23°C), 72 hr	13 %	13 %	
158°F (70°C), 22 hr	29 %	29 %	
212°F (100°C), 22 hr	57 %	57 %	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore A)	40	40	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

Injection	Typical Value (English)	Typical Value (SI)
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

Notes

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

[2] Measured on 100x100x2mm plates, results may vary depending on processing parameters, part geometry and tool design.

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