



OnFlex™ S KE 50A-3S1731

Thermoplastic Elastomer

Key Characteristics

Product Description

OnFlex™-S KE thermoplastic elastomer compounds are based on hydrogenated styrenic block copolymers. This range of compounds are specially compatibilized to provide excellent adhesion to a variety polar substrates including PC, ABS, PC/ABS, ASA and PVC. OnFlex-S KE compounds can be processed by 2K molding or overmoulding, insert moulding or co-extrusion. In addition to this OnFlex-S KE compounds are formulated to provide good compression set performance, even at elevated temperatures, good processability, a wide hardness range, low temperature flexibility, good scratch resistance, good colourability and surface appearance, and excellent mechanical properties.

General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Adhesion	• Good Scratch Resistance	
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	1.07 g/cm ³	1.07 g/cm ³	ISO 1183
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Stress (100% Strain)	247 psi	1.70 MPa	ISO 37
Tensile Stress (300% Strain)	566 psi	3.90 MPa	ISO 37
Tensile Stress (Break)	624 psi	4.30 MPa	ISO 37
Tensile Elongation (Break)	350 %	350 %	ISO 37
Compression Set			ISO 815
73°F (23°C), 72 hr	35 %	35 %	
158°F (70°C), 22 hr	48 %	48 %	
212°F (100°C), 22 hr	68 %	68 %	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Shore Hardness (Shore A)	50	50	ISO 868
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Glow Wire Flammability Index			IEC 60695-2-12
0.04 in (1.0 mm)	1200 °F	650 °C	
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. Compression Set values are for parts annealed for 24 hours at 100°C.

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	212 °F	100 °C
Drying Time	2.0 hr	2.0 hr
Processing (Melt) Temp	392 to 446 °F	200 to 230 °C

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Injection	Typical Value (English)	Typical Value (SI)
Mold Temperature	68.0 to 104 °F	20.0 to 40.0 °C
Injection Rate	Slow-Moderate	Slow-Moderate

Notes

¹ Typical values are not to be construed as specifications.

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