



OnFlex™-S KE 40A-3S1727

Styrenic 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 overmolding, 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 • North America	• South America
Features	• Good Adhesion	• Scratch 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	1.06 g/cm ³	1.06 g/cm ³	ISO 1183
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Stress (100% Strain)	174 psi	1.20 MPa	ISO 37
Tensile Stress (300% Strain)	406 psi	2.80 MPa	ISO 37
Tensile Stress (Break)	522 psi	3.60 MPa	ISO 37
Tensile Elongation (Break)	300 %	300 %	ISO 37
Tear Strength	76 lbf/in	13 kN/m	ISO 34-1
Compression Set			ISO 815
73°F (23°C), 72.0 hr	38 %	38 %	
158°F (70°C), 22.0 hr	51 %	51 %	
212°F (100°C), 22.0 hr	72 %	72 %	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Shore Hardness (Shore A)	40	40	ISO 868

Additional Properties

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
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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