



# OnFlex™ S KG 50A-3S2017

## Thermoplastic Elastomer

### Key Characteristics

Product Description			
OnFlex™-S KG thermoplastic elastomer compounds are based on hydrogenated styrenic block copolymers. This range of compounds are specially compatibilized to provide excellent adhesion to polyamide polymers including PA6, PA6.6, PA11 and PA12. OnFlex™-S KG can be processed by 2K molding or overmolding, insert molding or co-extrusion. In addition to this, OnFlex™-S KG compounds are formulated to provide good processability and a good cost/performance ratio, a wide hardness range, good colourability and good mechanical properties.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose • Good Adhesion		
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 <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.13 g/cm <sup>3</sup>	1.13 g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (190°C/5.0 kg)	20 cm <sup>3</sup> /10min	20 cm <sup>3</sup> /10min	ISO 1133
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Stress (100% Strain)	247 psi	1.70 MPa	ISO 37
Tensile Stress (300% Strain)	377 psi	2.60 MPa	ISO 37
Tensile Stress (Break)	464 psi	3.20 MPa	ISO 37
Tensile Elongation (Break)	330 %	330 %	ISO 37
Tear Strength	103 lbf/in	18.0 kN/m	ISO 34-1
Compression Set			ISO 815
73°F (23°C), 72 hr	32 %	32 %	
158°F (70°C), 22 hr	62 %	62 %	
212°F (100°C), 22 hr	82 %	82 %	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Shore Hardness (Shore A)	50	50	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
Processing (Melt) Temp	392 to 500 °F	200 to 260 °C
Mold Temperature	86 to 122 °F	30 to 50 °C

Injection	Typical Value (English)	Typical Value (SI)
Injection Rate	Moderate	Moderate

**Notes**

<sup>1</sup> Typical values are not to be construed as specifications.



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