OnFlex™ S EF 80A-3S1977 Black

Thermoplastic Elastomer

Key Characteristics

Product Description			
OnFlex™-S EF thermoplastic elastomer compounds are based on hydrogenated styrenic block copolymers. This range of compounds are formulated to deliver good mechanical properties together with excellent processability, in addition to typical OnFlex™-S properties such as a wide hardness range, low compression set, good colourability and a wide temperature operating range. OnFlex™-S EF compounds are semi-filled, making them opaque and with a medium density.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• High Flow		
Uses	• Appliances • Automotive Applications	• Consumer Applications • General Purpose	• Industrial Applications
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	0.980 g/cm³	0.980 g/cm³	ISO 1183
Mechanical	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Abrasion Loss	145 mm³	145 mm³	DIN 53516
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress (100% Strain)	667 psi	4.60 MPa	ISO 37
Tensile Stress (300% Strain)	870 psi	6.00 MPa	ISO 37
Tensile Stress (Break)	1740 psi	12.0 MPa	ISO 37
Tensile Elongation (Break)	700 %	700 %	ISO 37
Tear Strength	242 lbf/in	42.3 kN/m	ISO 34-1
Compression Set			ISO 815
73°F (23°C), 72 hr	30 %	30 %	
158°F (70°C), 22 hr	65 %	65 %	
212°F (100°C), 22 hr	91 %	91 %	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore A, 10 sec)	80	80	ISO 48-4
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.

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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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