



# OnFlex™-S EF 80A-3S1977

## Styrenic 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 • North America	• South America
Features	• High Flow		
Uses	• Appliances • Automotive Applications	• Consumer Applications • General Purpose	• Industrial Applications
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	0.980 g/cm <sup>3</sup>	0.980 g/cm <sup>3</sup>	ISO 1183
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Abrasion Loss	145 mm <sup>3</sup>	145 mm <sup>3</sup>	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	240 lbf/in	42 kN/m	ISO 34-1
Compression Set			ISO 815
73°F (23°C), 72.0 hr	30 %	30 %	
158°F (70°C), 22.0 hr	65 %	65 %	
212°F (100°C), 22.0 hr	91 %	91 %	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Shore Hardness (Shore A)	80	80	ISO 868

#### Additional Properties

Properties are measured using injection molded plaques.

### Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Processing (Melt) Temp	356 to 428 °F	180 to 220 °C
Mold Temperature	86.0 to 140 °F	30.0 to 60.0 °C
Injection Rate	Fast	Fast

#### Notes

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

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