OnFlex™ S EF 80A-3S1977

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		
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.

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

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Notes

[1] Typical values are not to be construed as specifications.

CONTACT INFORMATION

North America

Avon Lake, United States
33587 Walker Road
Avon Lake, OH, United States , 44012
+1 440 930 1000
+1 844 4AVIENT

South America

Sao Paulo, Brazil
Av. Francisco Nakasato, 1700
13295-000 Itupeva
Sao Paulo, Brazil
+55 11 4593 9200

Asia

Shanghai, China
2F, Block C
200 Jinsu Road
Pudong, 201206
Shanghai, China
+86 (0) 21 6028 4888

Europe

Pommerloch, Luxembourg
19 Route de Bastogne
Pommerloch, Luxembourg , L-9638
+352 269 050 35

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