OnFlex™ S SH 70A-3E1858

Thermoplastic Elastomer

Key Characteristics

Product Description

OnFlex™-S SH thermoplastic elastomer compounds are based on hydrogenated styrenic block copolymers. This range of compounds are formulated to deliver excellent mechanical properties in addition to typical OnFlex™-S properties such as a wide hardness range, low compression set, good processability, good colourability and a wide temperature operating range. OnFlex™-S SH compounds are filled, and are therefore opaque and a moderately high density.

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose	• UV Resistant	
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	1.20 g/cm³	1.20 g/cm³	ISO 1183
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress (100% Strain)	421 psi	2.90 MPa	ISO 37
Tensile Stress (300% Strain)	653 psi	4.50 MPa	ISO 37
Tensile Stress (Break)	1230 psi	8.50 MPa	ISO 37
Tensile Elongation (Break)	530 %	530 %	ISO 37
Tear Strength	177 lbf/in	31.0 kN/m	ISO 34-1
Compression Set			ISO 815
73°F (23°C), 72 hr	20 %	20 %	
158°F (70°C), 22 hr	50 %	50 %	
212°F (100°C), 22 hr	68 %	68 %	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore A, 10 sec)	70	70	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

Notes

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

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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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