OnFlex™-S SL 55A-3S1870

Styrenic Thermoplastic Elastomer

Key Characteristics

Product Description			
OnFlex™-S SL 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. Being unfilled, OnFlex™-S SL compounds are translucent and have a low density.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	• South America
Features	• General Purpose	• Good UV Resistance	
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	0.890 g/cm³	0.890 g/cm³	ISO 1183
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress (100% Strain)	247 psi	1.70 MPa	ISO 37
Tensile Stress (300% Strain)	406 psi	2.80 MPa	ISO 37
Tensile Stress (Break)	1070 psi	7.40 MPa	ISO 37
Tensile Elongation (Break)	600 %	600 %	ISO 37
Tear Strength	160 lbf/in	28 kN/m	ISO 34-1
Compression Set			ISO 815
73°F (23°C), 72.0 hr	19 %	19 %	
158°F (70°C), 22.0 hr	41 %	41 %	
212°F (100°C), 22.0 hr	62 %	62 %	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore A)	55	55	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

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