OnFlex™ S HS 70A-3E2543

Thermoplastic Elastomer

Key Characteristics

Product Description

This OnFlex™-S HS thermoplastic elastomer compounds is based on hydrogenated styrenic block copolymers. This range of compounds are formulated to deliver high strength and medium-low density in addition to typical OnFlex™-S properties such as a wide hardness range, good mechanical properties, good processability, good colourability and a wide temperature operating range.

General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• General Purpose	• High Strength	
Uses	• Appliances • Automotive Applications	• Consumer Applications • General Purpose	• Industrial Applications
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding	• Pipe Extrusion	

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	1.00 g/cm³	1.00 g/cm³	ISO 1183
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress			ISO 37
Across Flow : Break, 0.0787 in (2.00 mm) [2]	1610 psi	11.1 MPa	
Flow : Break, 0.0787 in (2.00 mm) [3]	1580 psi	10.9 MPa	
Flow : Break, 0.0787 in (2.00 mm) [2]	1040 psi	7.20 MPa	
Tensile Elongation			ISO 37
Across Flow : Break, 0.0787 in (2.00 mm) [2]	560 %	560 %	
Flow : Break, 0.0787 in (2.00 mm) [3]	590 %	590 %	
Flow : Break, 0.0787 in (2.00 mm) [2]	420 %	420 %	
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

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Extrusion	Typical Value (English)	Typical Value (SI)
Cylinder Zone 1 Temp.	338 °F	170 °C
Cylinder Zone 2 Temp.	356 °F	180 °C
Cylinder Zone 3 Temp.	374 °F	190 °C
Die Temperature	374 to 392 °F	190 to 200 °C

Notes

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

[2] Injection molded

[3] Extruded

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