OnFlex™ S 40A-3E2533

Thermoplastic Elastomer

Key Characteristics

Product Description			
OnFlex™ S thermoplastic elastomer compounds are based on hydrogenated styrenic block copolymers. OnFlex S 40A-3E2533 is formulated to have low odour and fogging, and is stabilized for metal contact.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Copper Contact Stabilized	• Low Fogging	• Low Odor
Uses	• Automotive Applications	• Automotive Interior Parts	
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	0.990 g/cm³	0.990 g/cm³	ISO 1183
Environmental Stress-Cracking Resistance (ESCR)	• > 7.00 • > 5.00 • > 2.00 hr • > 1.00 • > 4.00	• > 7.00 • > 5.00 • > 2.00 hr • > 1.00 • > 4.00	ASTM D1693

Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Stress [2]			DIN 53504
Across Flow : Break, 73°F (23°C), 0.0787 in (2.00 mm)	986 psi	6.80 MPa	
Flow : Break, 73°F (23°C), 0.0787 in (2.00 mm)	653 psi	4.50 MPa	
Tensile Elongation [2]			DIN 53504
Across Flow : Break, 73°F (23°C), 0.0787 in (2.00 mm)	780 %	780 %	
Flow : Break, 73°F (23°C), 0.0787 in (2.00 mm)	640 %	640 %	
Compression Set (158°F (70°C), 22 hr)	35 %	35 %	ISO 815

Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Shore Hardness (Shore A, 10 sec)	40	40	ISO 48-4

Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Spread	60 mm/min	60 mm/min	FMVSS 302

Additional Information	Typical Value (English)	Typical Value (SI)	Test Method
Fogging [3]	1.25 mg	1.25 mg	DIN 75201
Generic Material Type	Styrenic Thermoplastic Elastomer (TES)	Styrenic Thermoplastic Elastomer (TES)	
Odor Rating [4]	3.0	3.0	VDA 270

Properties are measured using injection molded plaques.

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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
Back Pressure	> 3.00 psi	> 0.0207 MPa

Notes

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

[2] 7.9 in/min (200 mm/min)

[3] Method B

[4] Method A3

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