



# 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 <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	0.990 g/cm <sup>3</sup>	0.990 g/cm <sup>3</sup>	ISO 1183
Environmental Stress-Cracking Resistance (ESCR)	• > 7.00	• > 7.00	ASTM D1693
	• > 5.00	• > 5.00	
	• > 2.00 hr	• > 2.00 hr	
	• > 1.00	• > 1.00	
	• > 4.00	• > 4.00	
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Stress <sup>2</sup>			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 <sup>2</sup>			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)	40	40	ISO 868
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Spread	60 mm/min	60 mm/min	FMVSS 302
Fogging <sup>3</sup>	1.25 mg	1.25 mg	DIN 75201
Additional Information	Typical Value (English)	Typical Value (SI)	Test Method
Generic Material Type	Styrenic Thermoplastic Elastomer (TES)	Styrenic Thermoplastic Elastomer (TES)	
Odor Rating <sup>4</sup>	3.0	3.0	VDA 270

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
Back Pressure	> 3.00 psi	> 0.0207 MPa

**Notes**

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> 7.9 in/min (200 mm/min)

<sup>3</sup> Method B

<sup>4</sup> Method A3

The logo for PolyOne, featuring the word "PolyOne" in a stylized, italicized serif font with a horizontal line underneath.

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