



OnFlex™-V 1090A-S0009

Thermoplastic Vulcanizate

Key Characteristics

Product Description

OnFlex™-V provides the performance of traditional vulcanised rubber, but with the processability of a thermoplastic. OnFlex™-V 1000 series thermoplastic elastomer compounds are based on a polyolefin phase with a cross-linked EPDM phase dispersed within it. This range of compounds are specially formulated for injection moulding processes. In addition to this, OnFlex™-V 1000 series thermoplastic elastomer compounds provide excellent colourability (low yellowness), good mechanical properties, excellent flexibility over a wide temperature range, a wide hardness range, and good hydrocarbon, heat ageing and weather resistance.

General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	• South America
Features	• General Purpose		
Uses	• Automotive Applications • Construction 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	0.940 g/cm ³	0.940 g/cm ³	ISO 1183
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Stress (100% Strain)	725 psi	5.00 MPa	ISO 37
Tensile Stress (300% Strain)	957 psi	6.60 MPa	ISO 37
Tensile Stress (Break)	1580 psi	10.9 MPa	ISO 37
Tensile Elongation (Break)	480 %	480 %	ISO 37
Tear Strength	290 lbf/in	50 kN/m	ISO 34-1
Compression Set			ISO 815
73°F (23°C), 72.0 hr	35 %	35 %	
158°F (70°C), 22.0 hr	51 %	51 %	
212°F (100°C), 22.0 hr	64 %	64 %	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Shore Hardness (Shore A)	90	90	ISO 868

Additional Properties

Properties are measured using injection molded plaques.

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80.0 °C
Drying Time	3.0 hr	3.0 hr
Processing (Melt) Temp	356 to 410 °F	180 to 210 °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.

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