OnFlex™-V 1085A-S0008

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	0.930 g/cm³	0.930 g/cm³	ISO 1183
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress (100% Strain)	682 psi	4.70 MPa	ISO 37
Tensile Stress (300% Strain)	1020 psi	7.00 MPa	ISO 37
Tensile Stress (Break)	1350 psi	9.30 MPa	ISO 37
Tensile Elongation (Break)	460 %	460 %	ISO 37
Tear Strength	250 lbf/in	44 kN/m	ISO 34-1
Compression Set			ISO 815
73°F (23°C), 72.0 hr	41 %	41 %	
158°F (70°C), 22.0 hr	52 %	52 %	
212°F (100°C), 22.0 hr	59 %	59 %	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore A)	85	85	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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