OnFlex™ V 3050D-S0097

Thermoplastic Elastomer

Key Characteristics

Product Description
OnFlex™-V provides the performance of traditional vulcanised rubber, but with the processability of a thermoplastic. OnFlex™-V 3000 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 to provide the melt strength and processability required for blow-moulding processes. In addition to this, OnFlex™-V 3000 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 • Latin America	• North America
Features	• General Purpose		
Uses	• Automotive Applications • Construction Applications	• Consumer Applications • General Purpose	• Industrial Applications
RoHS Compliance	• RoHS Compliant		
Forms	• Pellets		
Processing Method	• Blow Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density	0.920 g/cm³	0.920 g/cm³	ISO 1183
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress (100% Strain)	1230 psi	8.50 MPa	ISO 37
Tensile Stress (300% Strain)	1450 psi	10.0 MPa	ISO 37
Tensile Stress (Break)	2350 psi	16.2 MPa	ISO 37
Tensile Elongation (Break)	600 %	600 %	ISO 37
Compression Set			ISO 815
73°F (23°C), 72 hr	45 %	45 %	
158°F (70°C), 22 hr	70 %	70 %	
212°F (100°C), 22 hr	75 %	75 %	
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore D, 10 sec)	50	50	ISO 48-4
Additional Information	**Typical Value (English)**	**Typical Value (SI)**	
Generic Material Type	Thermoplastic Vulcanizate (TPV)	Thermoplastic Vulcanizate (TPV)	

Properties are measured using injection molded plaques.

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 hr	3.0 hr
Processing (Melt) Temp	392 to 446 °F	200 to 230 °C
Mold Temperature	86 to 140 °F	30 to 60 °C
Injection Rate	Fast	Fast

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Notes

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

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