



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/cm ³	0.920 g/cm ³	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)	50	50	ISO 868
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