



OnFlex™ -V 1165A-S0199

Thermoplastic Vulcanizate

Key Characteristics

Product Description

OnFlex™-V provides the performance of traditional vulcanised rubber, but with the processability of a thermoplastic. OnFlex™-V 1100 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 and strongly stabilized for excellent weatherability. In addition to this, OnFlex™-V 1100 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 and heat ageing resistance.

General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	• South America
Features	• Good UV Resistance		
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/cm ³	0.930 g/cm ³	ISO 1183
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Stress (100% Strain)	377 psi	2.60 MPa	ISO 37
Tensile Stress (300% Strain)	696 psi	4.80 MPa	ISO 37
Tensile Stress (Break)	769 psi	5.30 MPa	ISO 37
Tensile Elongation (Break)	330 %	330 %	ISO 37
Tear Strength	140 lbf/in	25 kN/m	ISO 34-1
Compression Set			ISO 815
73°F (23°C), 72.0 hr	30 %	30 %	
158°F (70°C), 22.0 hr	45 %	45 %	
212°F (100°C), 22.0 hr	41 %	41 %	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Shore Hardness (Shore A)	65	65	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	338 to 374 °F	170 to 190 °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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CONTACT INFORMATION

Americas

Argentina - Buenos Aires
+0054 11 4200 5917

Brasil - Campinas
+55 19 3206 0561

Mexico - Toluca
+52 722 2790200

United States - Avon Lake
+1 440 930 1000

United States - McHenry
+1 (815) 385-8500

Asia

China - Shenzhen
+86 (0) 755 2969 2888

China - Suzhou
+86 (0) 512 6823 24 38

China - Suzhou
+86 512 6265 2600

Hong Kong -
+852 2690 5332

India - Mumbai
+91 9820 194 220

Taiwan - Yonghe City,
+886 9396 99740

Europe

Germany - Gaggenau
+49 (0) 7225 6802 0

Netherlands - The Netherlands
+31 (0) 165 331 293

Spain - Barbastro (Huesca)
+34 (0) 9 7431 0314

Turkey - Cekmece-Istanbul-Türkiye
+90 (0) 212 549 2256



Beyond Polymers.

Better Business Solutions. SM

www.polyone.com

PolyOne Americas

33587 Walker Road
Avon Lake, Ohio 44012
United States
+1 440 930 1000
+1 866 POLYONE

PolyOne Asia

No. 88 Guoshoujing Road
Z.J Hi-tech Park, Pudong
Shanghai, 201203, China
+86 (0) 21 5080 1188

PolyOne Europe

2 Rue Melville Wilson
5330 Assesse, Belgium
+32 (0) 83 660 211