



OnFlex™ AF 7215-90 B

Thermoplastic Elastomer

Key Characteristics

Product Description

OnFlex™ AF 7215-90 B is an easy processing TPE designed for a variety of automotive applications.

- Excellent surface finish
- Good adhesion to polypropylene
- Excellent performance in static mechanical parts such as seals & grips, panel fasteners, plugs, clips and cable clamps.
- Improved UV stability

General

Material Status	• Commercial: Active		
Regional Availability	• Asia Pacific	• Europe	• North America
Features	• Good Processability		
Uses	• Automotive Applications • Fasteners	• Gaskets • Overmolding	• Plugs
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties ¹

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density ²	0.990 g/cm ³	0.990 g/cm ³	ISO 1133
Molding Shrinkage - Flow ³ 0.0787 in (2.00 mm), Injection Molded	0.013 in/in	1.3 %	Internal Method
Molding Shrinkage - Across Flow ³ 0.0787 in (2.00 mm), Injection Molded	0.013 in/in	1.3 %	Internal Method
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength - after heat aging 96h @ 90°C ⁴	2176 psi	15.0 MPa	ISO 37
Tensile Elongation - after heat aging 96h @ 90°C ⁴	700 %	700 %	ISO 37
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength ^{5, 2} (Break)	2320 psi	16.0 MPa	ISO 37
Tensile Elongation ^{5, 2} (Break)	1000 %	1000 %	ISO 37
Tear Strength ²	331 lbf/in	58.0 kN/m	ISO 34-1
Compression Set ²			ISO 815
73°F (23°C), 72 hr	33 %	33 %	
158°F (70°C), 22 hr	54 %	54 %	
212°F (100°C), 22 hr	65 %	65 %	
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness			ISO 7619
Shore A, 10 sec ²	90	90	
Shore A, 10 sec ⁶	86	86	
Aging	Typical Value (English)	Typical Value (SI)	Test Method
Change in Volume in Air 194°F (90°C), 96 hr	-0.30 %	-0.30 %	Internal Method

Electrical	Typical Value (English)	Typical Value (SI)	Test Method
Volume Resistivity	6.5E+16 ohms·cm	6.5E+16 ohms·cm	IEC 60093
Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Flame Rating ⁷ (0.06 in (1.6 mm), black)	HB	HB	FMVSS 302
Additional Information	Typical Value (English)	Typical Value (SI)	Test Method
Weather Resistance ⁸	expected to pass PV 3929	expected to pass PV 3929	Internal Method

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Suggested Max Regrind	20 %	20 %
Rear Temperature	320 to 370 °F	160 to 188 °C
Middle Temperature	350 to 380 °F	177 to 193 °C
Front Temperature	370 to 410 °F	188 to 210 °C
Nozzle Temperature	370 to 420 °F	188 to 216 °C
Mold Temperature	86 to 140 °F	30 to 60 °C
Injection Rate	Fast	Fast
Back Pressure	0.00 to 120 psi	0.00 to 0.827 MPa
Screw Speed	40 to 100 rpm	40 to 100 rpm

Notes

¹ Typical values are not to be construed as specifications.

² Europe

³ 100x100x2mm.

Ejected part is smaller than the mould cavity. Strain resulting from strong longitudinal shrinkage can cause an increase in the transversal dimensions.

⁴ 200 mm/min

⁵ 7.9 in/min (200 mm/min)

⁶ after heat aging 96 h @ 90°C

⁷ horizontal burning rate measured 40 mm / min

⁸ OnFlex AF 7215-60 B (60Sh A; black) as part the of the AF-range has been tested according waethering test PV 3929 (Kalahari-Test). It has successfully passed the test time of 1500h.

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