OnFlex™ AF 7210-50

Thermoplastic Elastomer

Key Characteristics

Product Description

OnFlex™ AF 7210-50 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.
- Good UV stability
- OnFlex™ AF 7210-50B = black
- OnFlex™ AF 7210-50N = natural

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	• Natural Color	
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density			
-- [2]	0.990 g/cm³	0.990 g/cm³	ISO 1133
-- [3]	0.990 g/cm³	0.990 g/cm³	ASTM D792
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Strength			
Break [2]	943 psi	6.50 MPa	ISO 37
Break [3]	870 psi	6.00 MPa	ASTM D412
Tensile Elongation			
Break [2]	600 %	600 %	ISO 37
Break [3]	680 %	680 %	ASTM D412
Tear Strength			
-- [2]	131 lbf/in	23.0 kN/m	ISO 34-1
-- [3]	114 lbf/in	20.0 kN/m	ASTM D624
Compression Set			
73°F (23°C), 72 hr [2]	21 %	21 %	ISO 815
73°F (23°C), 72 hr [3]	22 %	22 %	ASTM D395
158°F (70°C), 22 hr [2]	38 %	38 %	ISO 815
158°F (70°C), 22 hr [3]	39 %	39 %	ASTM D395
212°F (100°C), 22 hr [2]	57 %	57 %	ISO 815
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore A, 10 sec)	50	50	ISO 48-4

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Flammability	Typical Value (English)	Typical Value (SI)	Test Method
Burning Rate	< 3.9 in/min	< 100 mm/min	DIN 75200
Additional Information	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Weather Resistance [4]	expected to pass	expected to pass	SAE J2527

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] China

[4] OnFlex AF 7210-60B (60Sh A; black) as part the of the AF-range has been tested according waethering test SAE J2527. It has successfully passed the extended test time of 1500h.

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