



OnFlex™ AF 7210-40

Thermoplastic Elastomer

Key Characteristics

Product Description

OnFlex™ AF 7210-40 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 7210-40B = black
- OnFlex™ AF 7210-40N = 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/cm ³	0.990 g/cm ³	ISO 1183
-- ³	0.990 g/cm ³	0.990 g/cm ³	ASTM D792
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength			
Break ²	725 psi	5.00 MPa	ISO 37
Break ³	725 psi	5.00 MPa	ASTM D412
Tensile Elongation			
Break ²	600 %	600 %	ISO 37
Break ³	650 %	650 %	ASTM D412
Tear Strength			
-- ²	120 lbf/in	21.0 kN/m	ISO 34-1
-- ³	100 lbf/in	17.5 kN/m	ASTM D624
Compression Set			
73°F (23°C), 72 hr ²	16 %	16 %	ISO 815
73°F (23°C), 72 hr ³	18 %	18 %	ASTM D395
158°F (70°C), 22 hr ²	32 %	32 %	ISO 815
158°F (70°C), 22 hr ³	35 %	35 %	ASTM D395
212°F (100°C), 22 hr ²	56 %	56 %	ISO 815

Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness			
Shore A, 3 sec ²	40	40	ISO 868
Shore A, 10 sec ³	36	36	ASTM D2240
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; black) as part of the AF-range has been tested according weathering test SAE J2527. It has successfully passed the extended test time of 1500h.

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