



# OnFlex™ AF 7210-70

## Thermoplastic Elastomer

### Key Characteristics

#### Product Description

OnFlex™ AF 7210-70 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 7210-70B = black
- OnFlex™ AF 7210-70N = natural

#### General

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

### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density			
-- <sup>2</sup>	0.990 g/cm <sup>3</sup>	0.990 g/cm <sup>3</sup>	ISO 1133
-- <sup>3</sup>	0.990 g/cm <sup>3</sup>	0.990 g/cm <sup>3</sup>	ASTM D792
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength			
Break <sup>2</sup>	1380 psi	9.50 MPa	ISO 37
Break <sup>3</sup>	1160 psi	8.00 MPa	ASTM D412
Tensile Elongation			
Break <sup>2</sup>	700 %	700 %	ISO 37
Break <sup>3</sup>	700 %	700 %	ASTM D412
Tear Strength			
-- <sup>2</sup>	206 lbf/in	36.0 kN/m	ISO 34-1
-- <sup>3</sup>	189 lbf/in	33.0 kN/m	ASTM D624
Compression Set			
73°F (23°C), 72 hr <sup>2</sup>	30 %	30 %	ISO 815
73°F (23°C), 72 hr <sup>3</sup>	31 %	31 %	ASTM D395
158°F (70°C), 22 hr <sup>2</sup>	41 %	41 %	ISO 815
158°F (70°C), 22 hr <sup>3</sup>	45 %	45 %	ASTM D395
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness			
Shore A, 3 sec <sup>2</sup>	70	70	ISO 868
Shore A, 10 sec <sup>3</sup>	67	67	ASTM D2240

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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 <sup>4</sup>	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	86.0 to 140 °F	30.0 to 60.0 °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

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> Europe

<sup>3</sup> China

<sup>4</sup> 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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