

Technical Data Sheet

❖ Alfater XL®



ALFATER XL A90I 3EF0010

MOCOM

Base Polymer	Thermoplastic Vulcanisate (PP+EPDM)
Colour	black
Service Temperature	max. range (depending on load, geometry, etc.) -40-125 °C
Special Features	easy flow, high surface quality, black fulfills weathering dry, hot (Kalahari, PV3929), black fulfills weathering moist, hot (Florida, PV3930), good weathering resistance, good chemical resistance, good ozone resistance, good hot air resistance, good hydrolysis resistant
Market Segment	Automotive, building and construction, do-it-yourself, electrical and electronic, sport and leisure, Furniture
Application Area	injection moulded parts
Typical Applications	seals, sealing lip, handles, soft touch elements, impact protection / shock absorber, protection caps, thin walled parts, profile, cable ducts, 2K components, casters
Adhesion to	Polypropylene Homopolymer, Polypropylene Copolymer, Polyethylene, Thermoplastic Vulcanisate (PP+EPDM), Thermoplastic Olefin Elastomer, Thermoplastic Elastomer general

Pre-Drying Conditions	in a dry air (dessiccant) dryer 70-80 °C for 2-4 h max. moisture content <0,10 %
Processing Injection Moulding	melt temperature 195-230 °C mould temperature 10-70 °C injection speed middle - high back pressure (hydraulic) >3 bar holding pressure 50-70% of injection pressure
Storage	dry, protected from light tightly sealed

Properties	Value	Dimension	Test Norm
Mechanical Properties			
Tensile Stress at 100% Elongation (Type 2)	5.8	MPa	ISO 37
Tensile Strength (Type 2)	8.1	MPa	ISO 37
Tear Strength (Method Ba)	42	kN/m	ISO 34-1
Elongation at Break (Type 2)	425	%	ISO 37
Shore Hardness A (15s)	90	-	ISO 868
Thermal Properties			
Brittleness Temperature (method B)	-70	°C	ISO 812
Coeff. of Linear Therm. Expansion (parallel)	10.1	E-6/K	ISO 11359-1/-2
Coeff. of Linear Therm. Expansion (normal)	14.3	E-6/K	ISO 11359-1/-2
Compression Set (22h / 100 °C / 25% / Type A)	63	%	ISO 815
Compression Set (22h / 70 °C / 25% / Type A)	55	%	ISO 815

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Compression Set (72h / 22 °C / 25% / Type A)	40	%	ISO 815
Compression Set (72h / 125 °C / 25% / Type A)	80	%	ISO 815

Electrical Properties

Tracking Resistance (CTI)	600	-	IEC 60112
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Rheological Properties

Shrinkage (lengthwise, 24h)	2.5 - 2.9	%	ISO 294-4
Shrinkage (lateral, 24h)	1.8 - 2	%	ISO 294-4
Spiral Flow (2 mm wall thickness)	55	cm	-

Physical Properties

Density	940	kg/m³	ISO 1183
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Ageing Properties

Ozone resistance (method A)	passed	-	ISO 1431-1A
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Flammability

Glow Wire (GWFI, 650 °C, 2.0mm)	passed	-	DIN EN 60695
Fire behavior FMVSS (2.0 mm)	passed	-	FMVSS 302/DIN 75200

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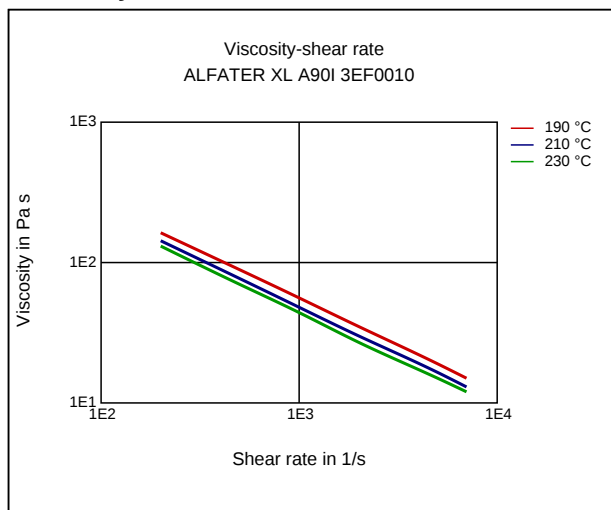
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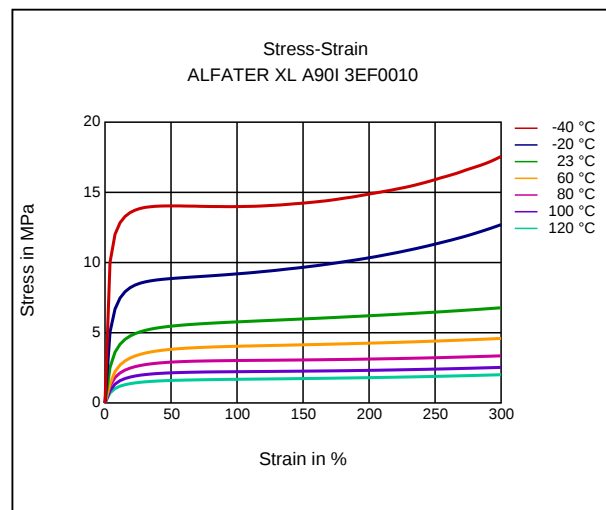
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Diagrams

Viscosity-shear rate



Stress-Strain



Dynamic Shear modulus-temperature

