

Datasheet AE350XF



AE350XF has "Polyamide-like" properties and convinces through very good elasticity. This Co-Polymer has a very high viscosity and keeps its high impact resistance even at low temperatures under dry conditioning and takes up water 50% less than Polyamide 6. AE350XF is a complete new and partly bio-based Co-Polymer.

Application

Material

Bio based engineering plastic co-polymer "polyamide-like".

Availability

	Value	Unit
Rod diameters	30-150	mm
Tube inside diameter	100	mm
Tube outside diameter	150	mm
Length standard	3000	mm
Sheet thickness	okt-40	mm
Sheet size	1000x2000	mm

AE350XF - Specifications

Physical properties

	Test standard	Value	Unit
Density	ISO 1183	1,07	g/cm ³
Thermal conductivity	METHOD A	0,3	W/m ^{°K}
Specific heat capacity	IEC 1006	1,7	J/g.K
Moisture absorption at 23°C, 50% RH	ISO 62	2,1	%
Water absorption at 23 °C	ISO 62	6	%
Flammability	UL 94	HB	[-]

Mechanical properties

	Test standard	Value	Unit
Tensile strength	ISO 527	1900	MPa
Hardness	ISO 868	76	SHORE D
Yield stress	ISO 527	57	MPa
Elongation at break	ISO 527	>300	%
Modulus of elasticity in tension		on request	
Bending modulus	Flexural test	1659	MPa
Flexural strength	ISO 178	67,2	MPa
Charpy impact strength +23°C		on request	
Charpy notched impact strength +23°C	ISO 179/1eA	7,2	kJ/m ²
Ball indentation hardness	ISO 2039-1	79,5	N/mm ²
Compressive modulus	ISO 604	1647	MPa

Thermal properties

	Test standard	Value	Unit
Min. working temperature		-50	°C
Max. working temperature		90	°C
Intermittent working temperature		160	°C
Heat distortion temperature	Method A ISO 75	80	°C
Melting temperature	ISO 3146	199	°C
Thermal coefficient of linear expansion		on request	

Friction properties

	Test standard	Value	Unit
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Electrical properties

	Test standard	Value	Unit
Dielectric constant		on request	
Dielectric loss factor		on request	
Dielectric strength	IEC 243	34	KV/mm
Dielectric constant at 1MHZ	IEC 250	3,1	[-]

Electrical properties

Volume resistivity	IEC 93	10^{14}	$\Omega \cdot \text{cm}$
Surface resistivity	IEC 93	10^{15}	Ω
Resistance to tracking (CTI)		on request	

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