

Datasheet AE900BL



AE900BL has high mechanical strength, heat resistance and good antifriction properties. It's characterized by a low coefficient of friction and good wear properties, unaffected by wet environments. AE900BL offers also a good resistance to a wide range of chemicals and many solvents. It is porosity freed and most formulations are approved for contact with food.

Application

Food processing, agriculture, medical, electric, electronic, automotive, general machine building, transport and logistics, bottle and car washing equipment, sports equipment, office machinery, textile.

Material

POM-C.

Availability

	Value	Unit
Rod diameters	6-500	mm
Tube inside diameter	10-375	mm
Tube outside diameter	25-500	mm
Length standard	1000/3000	mm
Sheet thickness	1-150	mm
Sheet size	610/1000/1220x2000/3000	mm



AE900BL - Specifications

Physical properties

	Test standard	Value	Unit
Density		1,41	g/cm ³
Thermal conductivity	Method A	0,33	W/m°K
Specific heat capacity	IEC 1006	1,5	J/g.K
Moisture absorption at 23°C, 50% RH	ISO 62	0,2	%
Water absorption at 23 °C	ISO 62	0,8	%
Flammability	UL 94	HB	[-]

Mechanical properties

	Test standard	Value	Unit
Tensile strength	ISO 527	65	MPa
Hardness	ISO 868	81	SHORE-D
Yield stress	ISO 527	65	MPa
Elongation at break	ISO 527	40	%
Modulus of elasticity in tension	ISO 527	2900	MPa
Bending modulus	Flexural test	2800	MPa
Flexural strength	ISO 178	95	MPa
Charpy impact strength +23°C	ISO 179/1eU	no break	kJ/m ²
Charpy notched impact strength +23°C	ISO/1eA	7	kJ/m ²
Ball indentation hardness	ISO 2039-1	125	N/mm ²
Compressive modulus	ISO 604	2400	MPa

Thermal properties

	Test standard	Value	Unit
Min. working temperature		-50	°C
Max. working temperature		100	°C
Intermittent working temperature		140	°C
Heat distortion temperature	Method A ISO 75	110	°C
Melting temperature	ISO 3146	164	°C
Glass transition temperature	ISO 3146	-60	°C
Thermal coefficient of linear expansion	DIN 53752	11	1/K.10-5

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	>20	KV/mm

Electrical properties

Dielectric constant at 1MHZ	IEC 250	3,8	[-]
Volume resistivity	IEC 93	10 ¹⁴	Ω.cm
Surface resistivity	IEC 93	10 ¹³	Ω
Resistance to tracking (CTI)	DIN EN 60112	600	[-]