

Datasheet AE1500XBL



AE1500XBL offers advantages in the electric and electronic industries as well as in the semiconductor industries. AE1500XBL displays high temperature resistance and impact strength.

Application

Food processing, aerospace, automotive, defence, electronics and semiconductor, oil and gas, nuclear - and hydropower, vacuum, medical, wire and cable production.

Material

Availability

	Value	Unit
Rod diameters	5-160	mm
Tube inside diameter	on request	
Tube outside diameter	on request	
Length standard	3000	mm
Sheet thickness	aug-60	mm
Sheet size	1000x2000	mm



AE1500XBL - Specifications

Physical properties

	Test standard	Value	Unit
Density	ISO 1183	1,3	g/cm ³
Thermal conductivity		on request	
Specific heat capacity		on request	
Moisture absorption at 23°C, 50% RH		on request	
Water absorption at 23 °C	ISO 62	0,4	%
Flammability	UL 94	V-0	[-]

Mechanical properties

	Test standard	Value	Unit
Tensile strength	ISO 527	105	MPa
Yield stress	ISO 527	105	MPa
Elongation at break	ISO 527	20	%
Modulus of elasticity in tension	ISO 527	4200	MPa
Bending modulus	Flexural test	3900	MPa
Flexural strength	ISO 178	160	MPa
Charpy impact strength +23°C	ISO 179/1eU	no break	kJ/m ²
Charpy notched impact strength +23°C	ISO 179/1eA	3,5	kJ/m ²
Ball indentation hardness	ISO 2039-1	229	N/mm ²
Compressive modulus	ISO 604	3500	MPa

Thermal properties

	Test standard	Value	Unit
Min. working temperature		-60	°C
Max. working temperature		260	°C
Intermittent working temperature		300	°C
Heat distortion temperature	Method A ISO 75	160	°C
Melting temperature	ISO 3146	340	°C
Glass transition temperature	ISO 3146	150	°C
Thermal coefficient of linear expansion	DIN 53752	5,8	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	
Surface resistance	IEC93	10 ¹⁴	Ω
Dielectric strength	IEC 243	15	KV/mm

Electrical properties

Dielectric constant at 1MHZ	IEC 250	3,05	[-]
Volume resistivity	IEC 93	10^{15}	$\Omega \cdot \text{cm}$
Surface resistivity	IEC 93	10^{14}	Ω
Resistance to tracking (CTI)		on request	

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