

Datasheet AEPE500



AEPE500 is manufactured in sintering presses using high-molecular-weight raw materials. It's used in a wide variety of shapes and colors in various industries. In addition to its good sliding characteristics, its good abrasion resistance is helpful in many different applications.

Application

Food industry, packaging and material handling, mechanical and plant engineering

Material

Polyethylene 500.

Availability

	Value	Unit
Rod diameters	on request	
Tube inside diameter	on request	
Tube outside diameter	on request	
Length standard	on request	
Sheet thickness	6-200	mm
Sheet size	2000-6000x1000-2500	mm



AEPE500 - Specifications

Physical properties

	Test standard	Value	Unit
Density	ISO 1183-1	0,96	g/cm ³
Thermal conductivity	DIN 52612	0,4	W/m°K
Specific heat capacity		on request	
Moisture absorption at 23°C, 50% RH		on request	
Water absorption at 23 °C	ISO 62	< 0,01	%
Flammability	UL 94	HB	[-]

Mechanical properties

	Test standard	Value	Unit
Hardness	ISO 868	63-65	SHORE D
Yield stress		on request	
Elongation at break	ISO 527-2	>500	%
Modulus of elasticity in tension	ISO 527-2	>800	MPa
Bending modulus		on request	
Flexural strength		on request	
Charpy impact strength +23°C		on request	
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Ball indentation hardness	ISO 2039-1	>35	MPa
Compressive modulus		on request	

Thermal properties

	Test standard	Value	Unit
Min. working temperature		-100	°C
Max. working temperature		80	°C
Intermittent working temperature		90	°C
Heat distortion temperature		on request	
Melting temperature	ISO 11357	130-135	°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 60243	<45	kV/mm
Dielectric constant at 1MHZ		on request	
Volume resistivity		on request	

Electrical properties

Surface resistivity	IEC 60093	< 10 ¹²	Ω
Resistance to tracking (CTI)		on request	

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