

## Datasheet AEPE300



AEPE300 is a high-density polyethylene suitable for numerous industrial applications.

### Application

Can be used for mechanical engineering, vacuum forming industry and chemical engineering.

### Material

Polyethylene 300.

### Availability

	Value	Unit
Rod diameters	10-300	mm
Tube inside diameter	on request	
Tube outside diameter	on request	
Length standard	6000	mm
Sheet thickness	1-200	mm
Sheet size	1000-6000 x 1000 -2500	mm



## AEPE300 - Specifications

### Physical properties

	Test standard	Value	Unit
Density	DIN EN ISO 1183-1	0,95	g/cm <sup>3</sup>
Thermal conductivity	DIN 52612-1	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	>60	SHORE D
Yield stress	ISO 527	>22	MPa
Elongation at break	ISO 527	>50	%
Modulus of elasticity in tension	ISO 527	>1000	MPa
Bending modulus		on request	
Flexural strength		on request	
Charpy impact strength +23°C		on request	
Charpy notched impact strength +23°C	ISO 179	>10	kJ/m <sup>2</sup>
Ball indentation hardness		on request	
Compressive modulus		on request	

### Thermal properties

	Test standard	Value	Unit
Min. working temperature		-50	°C
Max. working temperature		80	°C
Intermittent working temperature		100	°C
Heat distortion temperature		on request	
Melting temperature	ISO 11357-3	130	°C
Thermal coefficient of linear expansion	DIN 53752	105...230	10 <sup>-6</sup> /K

### Friction properties

	Test standard	Value	Unit
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### Electrical properties

	Test standard	Value	Unit
Dielectric constant	IEC 60250	2,4	[-]
Dielectric loss factor		on request	
Dielectric strength	IEC 60243	>40	Kv/mm
Dielectric constant at 1MHZ		on request	
Volume resistivity	DIN EN 62631-3-1	> 10 <sup>14</sup>	Ω.cm

## Electrical properties

Surface resistivity	DIN EN 62631-3-2	$> 10^{14}$	$\Omega$
Resistance to tracking (CTI)	IEC 60112	600	[-]

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