PE1000 AST - Polyetylene 1000 antistatic

Other material names PE1000 AST: PE-UHMW ESD, AST, antistatic, electric conductivity
Material group: Polyethylene

Protects against electrical charge build-up on wear surfaces. PE1000 AST is the ideal material to use when potentially volatile conditions exist in grain handling or munitions plants. It also protects expensive robotic an conveyor. PE1000 AST is resistant to chemical attack and moisture absorption, and retains key physical properties to -30° C.

Color of material:

Black

Typical applications:

- Protects against electrical charge build-up
- Reduces noise
- Self-lubricating
- Corrosion-resistant
- No moisture absorption

The material is used in:

Beverage industry
Food industry
Automobile industry

Material availability: Material is in stock

Material properties table

Specific weight	0.93 g/cm³
Yield strength	17 N/mm²
Tensile strength	35 N/mm²
Allowable mean pressure deformation 1%	4.50 N/mm²
Allowable mean pressure deformation 2%	8.00 N/mm²
Allowable mean pressure deformation 5%	14.00 N/mm²
p.v dry limit	0.08 MPa.m/s
Flexural strength	26 N/mm²
Tensibility	300 %
Flexural modulus	750 N/mm²
Tensile modulus	700 N/mm²
Impact toughness	bez zlomu
Notched toughness	>80 kJ/m²
Ball hardness	35 N/mm²
Friction coefficient	0.12
Sliding wear	0.05 um/km
Abrasive wear	110
Antistatic material	Yes
Specific internal resistance	10^(4) Ω

Specific surface resistance	10^(9) Ω.cm
Melting point	135 °C
Thermal expansion	20 10^(-5)/K
Thermal conductivity	0.41 W/(K.m)
Permanent use temperature	-200 ; 80 °C
Transient temperature of use	-200 ; 90 °C
Absorbability	0,01 %
Water absorption	0,01 %
Resistance - oils	resistant
Acid resistance	resistant
Durability - alcali	resistant
Food contact	No

Engineering plastics are supplied in the form of bars, plates, strips, tubes and sheets. From the semi-finished products the company TechPlasty has regularly in stock, we also supply blanks.

All standard and special materials are designed to meet your specific requirements. Their mechanical, thermal, and electrical properties and chemical resistance satisfy the most demanding requirements and this allows them to work even in the most difficult conditions. If you need advice when choosing the appropriate material for your application, please contact us. We'll gladly advise you. You can utilize the long-term experience of our technical advisors free-of- charge, who can visit you right in your operation and solve your requirements for engineering plastics directly at the site of their usage.

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