

PE2000C - Ceram PE

Other material names PE2000C: PE-UHMW with micro glas beads, Mikroglaskugeln

Material group: Polyethylene

For high load, high speed and severe sliding abrasion applications, PE2000C should be THE material of choice. Its high tensile strength and wear resistance have been successful in the lumber, paper, steel and agricultural industries. Composed of virgin polymer and premium additives, PE2000C is a shatter-resistant alternative to sintered ceramics, reducing parts wear and machine maintenance downtime.



Easily recognizable by the lime-green color. PE2000C does not meet FDA or USDA guidelines for food handling/processing.

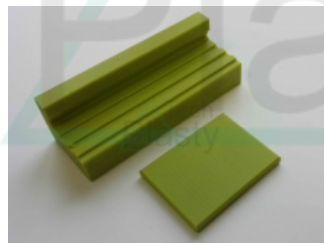
Color of material:

Yellow-green



Typical applications:

- Agriculture
- Lumber processing
- Material handling
- Pulp & paper mills
- Steel mills



The material is used in:

Food industry
Automobile industry

Features:

- High load, High-speed, abrasive applications
- Reduces noise
- Self-lubricating
- Wear-resistant
- Corrosion-resistant
- No moisture absorption

Material availability: Some sizes are in stock

Material properties table

Specific weight	0.95 g/cm ³
Yield strength	17 N/mm ²
Tensile strength	38 N/mm ²
p.v dry limit	0.08 MPa.m/s

Flexural strength	22 N/mm ²
Tensibility	350 %
Flexural modulus	752 N/mm ²
Tensile modulus	700 N/mm ²
Impact toughness	bez zlomu
Notched toughness	>120 kJ/m ²
Ball hardness	40 N/mm ²
Friction coefficient	0.12
Sliding wear	0.03 um/km
Abrasive wear	80
Antistatic material	No
Permittivity	2.10
Electrical strength	45 kV/mm
Specific internal resistance	10 ⁽¹²⁾ Ω
Specific surface resistance	10 ⁽¹²⁾ Ω.cm
Melting point	138 °C
Thermal expansion	20 10 ⁽⁻⁵⁾ /K
Thermal conductivity	0.40 W/(K.m)
Permanent use temperature	-200 ; 80 °C
Transient temperature of use	-200 ; 90 °C
Absorbability	0,01 %
Water absorption	0,1 %
Resistance - oils	resistant
Acid resistance	resistant
Durability - alcali	resistant
Food contact	No

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