

HabiPLAST™ Material Data Sheet

PE40+MO for tracks and machined parts



Material description

- MoS2 filled Ultra High Molecular Weight Polyethylene (PE-UHMW)
- Low wear and low friction in combination with steel belts or chains
- Not recommended in combination with POM, PP, PA belts or chains

Material properties

General	Nominal value
Code	PE40-B+MO
Color	black
Density	0.95 g/cm ³
Average molecular weight	5 • 10 ⁶ g/mol
Water absorption	<0.01 %
Thermal	Nominal value
Temperature range	-70°C to +65°C
Coeff. of linear thermal expansion a	0.20 mm/(m•K)
Electrical	Nominal value
Volume resistivity	>10 ¹² Ohm•cm
Surface resistivity	>10 ¹² Ohm
Mechanical	Nominal value
Tensile modulus	~580 MPa
Tensile strength (ultimate)	~18 Mpa
Tensile elongation (break)	≥200%
Charpy notched impact resistance	≥120 mJ/mm ²
Ball hardness	≥40 MPa

Habasit support for design and calculation

To assist the layout and calculation of Habasit plastic modular belt conveyors, Habasit provides additional documentation and instruments on request.

- Engineering Guide with further complementary details to the design and calculation of conveyors.
- Calculation Program to analyze the dimensioning and acting forces of a planned conveyor design.

For further information or additional documentation please contact Habasit.



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