

# HabiPLAST™ Material Data Sheet

## PE80+GB for machined parts



### Material description

- Glass ball filled Ultra High Molecular Weight Polyethylene (PE-UHMW)
- Very good wear properties

### Material properties

General	Nominal value
Code	PE80-B+GB
Color	black
Density	1.00 g/cm <sup>3</sup>
Average molecular weight	9 • 10 <sup>6</sup> g/mol
Water absorption	<0.02 %
Thermal	Nominal value
Temperature range	-70°C to +65°C
Coeff. of linear thermal expansion a	0.20 mm/(m•K)
Thermal conductivity	0.40 W/(m•K)
Electrical	Nominal value
Volume resistivity	10 <sup>14</sup> Ohm•cm
Surface resistivity	10 <sup>12</sup> Ohm
Mechanical	Nominal value
Tensile modulus	~700 MPa
Tensile strength (yield)	≥17 Mpa
Tensile elongation (break)	≥80%
Ball indentation hardness	~45 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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