# HabiPLAST™ Material Data Sheet PE80+EC for machined parts



## **Material description**

- Ultra High Molecular Weight Polyethylene (PE-UHMW)
- Low conductivity
- Very good wear and friction properties
- Good UV resistance

コード	Property
PE80-black+EC	

### **Material properties**

General	Nominal value
Code	PE80-B+EC
Color	black
Density	0.93 g/cm <sup>3</sup>
Average molecular weight	9 • 10 <sup>6</sup> 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)
Thermal conductivity	0.40 W/(m•K)
Electrical	Nominal value
Volume resistivity	10⁴ Ohm•cm
Surface resistivity	10 <sup>4</sup> Ohm
Mechanical	Nominal value
Tensile modulus	900 MPa
Tensile strength (ultimate)	>20 Mpa
Tensile elongation (break)	>350%
Ball hardness	42 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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