

HabiPLAST™ Material Data Sheet

PE05+RC regenerated, for tracks and machined parts



Material description

- Regenerated High Molecular Weight Polyethylene (PE-HMW)
- Good impact resistance even at low temperatures.
- Good price – performance ratio for less demanding applications.
- For demanding applications as well as for sliding applications with HabasitLINK or HabaCHAIN, we recommend the use of virgin Ultra High Molecular Weight Polyethylene (PE-UHMW) material.

Material properties

General	Nominal value
Code	PE05-B+RC
Color	black
Density	~0.96 g/cm ³
Average molecular weight	~500 • 10 ³ g/mol
Water absorption	<0.01 %
Thermal	Nominal value
Temperature range	-150°C to +80°C
Coeff. of linear thermal expansion a	0.20 mm/(m•K)
Electrical	Nominal value
Volume resistivity	-
Surface resistivity	-
Mechanical	Nominal value
Tensile modulus	~1250 MPa
Tensile strength (ultimate)	≥28 Mpa
Tensile elongation (brake)	≥400%
Charpy notched impact resistance	≥25 kJ/m ²
Ball hardness	~50 N/mm ²

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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