

# HabiPLAST™ Material Data Sheet

## PE10+RC regenerated, for corner tracks and machined parts



### Material description

- Regenerated Ultra High Molecular Weight Polyethylene (PEUHMW)
- Good wear and friction properties with POM and PP belts or chains
- Resistant against cleaning agents

### Material properties

General	Nominal value
Code	PE10-G+RC
Color	green
Density	~0.94 g/cm <sup>3</sup>
Average molecular weight	~1 - 4 • 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)
Electrical	Nominal value
Volume resistivity	10 <sup>13</sup> Ohm•cm
Surface resistivity	10 <sup>14</sup> Ohm
Mechanical	Nominal value
Tensile modulus	≥600 MPa
Tensile strength (ultimate)	≥17 MPa
Tensile elongation (break)	≥200%
Charpy impact resistance	No break
Charpy notched impact resistance	≥80 kJ/m <sup>2</sup>
Ball hardness	~38 N/mm <sup>2</sup>

### Coefficient of friction and wear rate

Belt / Chain	Friction (-)
HabasitLINK® POM	~0.24
HabasitLINK® PP	~0.24
HabasitLINK® PA	~0.32
HabaCHAIN® DP	~0.27
HabaCHAIN® LF	~0.22
HabaCHAIN® PT	~0.25
HabaCHAIN® TS	~0.23
HabaCHAIN® NG	~0.24

### 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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