

HabiPLAST™ Material Data Sheet

TriboPlus TP40 for profiles



Material description

- Low friction Ultra High Molecular Weight Polyethylene (PEUHMW)
- Very low wear rate
- Less dusting, less microplastic compared to standard PEUHMW
- Higher speed and load limit (high PxV limit) compared to standard PEUHMW
- Resistant against cleaning agents typically used in food applications
- Halogen free and RoHS conform
- Silicon free
- No limitations regarding recycling or incineration
- Suitable for direct food contact (not for fatty food), see Food Certificates – DoC on www.Habasit.com

Material properties

General	Nominal value
Code	TP40-C+FG
Color	blue
Density	0.93 g/cm ³
Water absorption	< 0.01 %
Thermal	Nominal value
Temperature range	-70°C to +65°C -94°F to +150°F
Coeff. of linear thermal expansion a	0.20 mm/(m•K) 0.00133 in/(ft•°F)
Electrical	Nominal value
Volume resistivity	>10 ¹⁴ Ohm•cm
Surface resistivity	>10 ¹³ Ohm

Coefficient of friction and wear rate

Belt / Chain	Friction (-) ⁽¹⁾	Wear rate ⁽²⁾
HabasitLINK® POM	0.17	A++
HabasitLINK® PP	0.16	A+
HabasitLINK® WHI	0.15	A++
HabasitLINK® PA	0.18	A+
HabasitLINK® PA+FRF	0.22	A++
HabasitLINK® PE	0.25	B
HabaCHAIN® DP	0.17	A++
HabaCHAIN® LF	0.16	A++
HabaCHAIN® PT	0.17	A+
HabaCHAIN® TS	0.15	A++
HabaCHAIN® NG	0.18	A++
Stainless Steel	0.13	A++

A++, Best performance
A+, Good performance
A, Standard combination
B, Acceptable but not recommended
C, Bad combination, do not use

⁽¹⁾ measured on a test conveyor with 1500 kg/m² load, speed range 5 – 15 m/min, test distance 800 km, standard conditions

⁽²⁾ evaluated from pin on disk test, total wear rate of pin and disk together, standard conditions

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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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