

HabiPLAST™ Material Data Sheet

TriboPlus TP40+FE, food contact approved, electrically conductive, for corner tracks and



Material description

- Developed especially as belt support for car and people mover applications
- Low friction Ultra High Molecular Weight Polyethylene (PEUHMW)
- Low electrical resistance, suitable for ESD protected areas (EPA)
- Very low wear rate with POM+AS, POM+EC, PP+AS, PP+EC and PP+FC belts
- Less dusting, less microplastic compared to standard PEUHMW
- Higher speed and load limit (high P×V 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

コード	Property
TP40-B+FE	

Material properties

General	Nominal value
Code	TP40-black+FE
Color	black
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 ⁶ Ohm•cm
Surface resistivity	>10 ⁶ Ohm
Mechanical	Nominal value
Tensile modulus	≥600MPa
Tensile strength (ultimate)	≥24 Mpa
Tensile elongation (break)	≥140%

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Coefficient of friction and wear rate

Belt / Chain	Friction (-) ⁽¹⁾	Wear rate ⁽²⁾
HabasitLINK® POM+AS	0.22	A++
HabasitLINK® POM+EC	0.21	A++
HabasitLINK® PP+AS	0.22	A++
HabasitLINK® PP+EC	0.21	A++
HabasitLINK® PP+FC	0.21	A+
HabaCHAIN® EC	0.21	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

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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