List of various synthetic fibres

pflug.

Driving gear and conveyor technology
Profiled belts
Continuous round belts turned and plaited

	Polyamide (PA)	Polyester (PES)	Polypropylene (PP) high-strength	Polyethylene high-strength (HMPE)	Aramid	LCP	PBO
Yarn strength CN/dtex	7 - 8	7 – 8.4	approx. 7	28 - 38	20 - 25	22 - 25	approx. 37
Spec. weight kg/dm³	1.14	1.38	0.91	0.96	1.44	1.41	1.52
Weakening due to moisture %	5 - 10	0	0	0	0	0	0
Water absorption %	1 - 7	0.5 - 2	0	0	2 - 5	1	0.6
Knot strength %	60 - 65	55 - 60	55 - 65	35 - 50	30 - 40	30 - 35	35 - 55
Light resistance %	good	very good	good (only if finished)	good	poor	poor	poor
Fracture strain %	16 - 27	10 - 16	12 - 20	3.8	2 - 4	3.3	2.5
Scrub resistance	very good	very good	satisfactory	satisfactory	sufficient	good	insufficient
Acids (50% concentr.) 25°C/100°C Residual value %	17 / 5 -10	80 / 0	no impact	no impact	good resistance in some cases	very good resistance	good resistance
Benzine	no impact	no impact	no impact	no impact	no impact	no impact	no impact
Diesel and lubricant	no impact	no impact	no impact	no impact	no impact	no impact	no impact
Solvents	Formic acid Acetic acid at high temperatures	Phenols Cresols Zinc chloride	little impact	little impact	little impact	little impact	little impact
Alkalis (Leaches)	resistant against weak leaches	resistant against leaches at 20°C / dissolved by leaches at 100°C	resistant against weak leaches	resistant	good resistance in some cases	very good resistance	very good resistance
Electrical properties	good insulation properties poor conductor	very good insulation properties	excellent insulation properties	excellent insulation properties	excellent insulation properties	excellent insulation properties	excellent insulation properties
Temperature limit temporary exposure approx. °C	130	170	80	70	400	200	550
Softening temperature approx. °C	170	225	140	120	-	-	-
Melting temperature approx. °C	215	260	170	150	carbonised at approx. 500°C	330	carbonised at approx. 650°C

Pflug Antriebs- und Fördertechnik
Lange Str. 38
D-89547 Gerstetten-Dettingen

Phone: 0049 (0)7324/5413
Fax.: 0049 (0)7324/5316

E-Mail: info@seilerei-pflug.de
HP: www.seilerei-pflug.com

Effective 09/2023