

Material Data Sheet

UTECRESIN

General Information

UTECRESIN is synthetic, woven polyester fiber fabric, impregnated with a specially modified phenolic resin and friction optimized with PTFE, which makes it an ideal material for guide elements. It has high bearing strength, good sliding properties and maximum resistances, particularly for absorbing extremely high lateral forces in hydraulic cylinders with lateral stresses. It can be used for the applications in hydraulic cylinder production, mining, construction machinery industry and mechanical engineering.

Physical properties

Colour:			Brown
Flexural strength:	ISO 178	N/mm ²	80
Density:	DIN 53479	g/cm ³	1.2
Tensile strength:	DIN 53504	N/mm ²	50
Water absorption:	DIN 53495	%	0.12
Compressive strength, flat wise:	ISO 604	N/mm ²	340
Ball pressure hardness vertical:	ISO 2039	N/mm ²	150
Ball pressure hardness parallel:	ISO 2039	N/mm ²	135
Friction coefficient against steel:	ASTM 1894	μ	0.20
Temperature resistance:	ISO 75-3	°C	+130

Remark

All test methods and values mentioned above are corresponding to ASTM or DIN standards and have been tested on standardized plates in the laboratory. All tests are made under laboratory conditions.