

## Application purpose and characteristics

Universally applicable. Blades in air motors, compressors and vacuum pumps, gears, bearings and bearing half-shells.

Thanks to the use of fine cotton fabric, this hard fabric has very good mechanical properties and is particularly suitable for parts with demanding mechanical processing in mechanical engineering. Well suited for components that require no special lubrication.

Material name, short description	PF CC
Material name, based on technical standards	Laminated paper fabric sheets made from phenolic resin and fine cotton fabric
Density	1.35 g/cm <sup>3</sup>
Color	brown
Compound code	PF CC 201.020-00

## Mechanical properties

Tensile strength	80 N/mm <sup>2</sup> DIN 53455
Shear strength	60 N/mm <sup>2</sup>
Flexural modulus of elasticity	7000 N/mm <sup>2</sup> DIN 53457
Bending strength 1	≥ 130 N/mm <sup>2</sup> DIN 53452
Compressive strength 1	170 N/mm <sup>2</sup> DIN 53454 parallel to the layer direction
Impact strength	#ErrorkJ/m <sup>2</sup> DIN 53453
Notch impact strength	≥ 9.00 kJ/m <sup>2</sup> DIN 53453

## Other attributes

Water absorption	249 mg DIN 53495
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## Thermal attributes

Limit temperature	120 °C VDE 0304
Coefficient of linear thermal expansion 1	20-40 * 10 <sup>-6</sup> /K VDE 0304
Thermal conductivity	0.2 W/(m·K) DIN 52612

## Electrical attributes

Comparative tracking index	100 CTI IEC 112
Dielectric constant 1	5 IEC 250
Dielectric strength 1	1 kV/mm DIN 53481 parallel to the layer direction
Dielectric strength 2	1.16 kV/mm DIN 53481 perpendicular to the layer direction
Insulation resistance	1 Ohm DIN 53482

In compliance with **RoHS** and **REACH** directives.

This information is based on our available data. These values are measured on standard test specimens and are within the normal tolerance range of material properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes. The customer is solely responsible for quality and suitability of material for his application. He has to test usage and processing prior to use. Angst+Pfister makes no guarantees for the suitability of the material for any given application and assumes no obligation or liability in connection with the information provided above.