DATASHEET

BEAR TUFNOL

Bear Tufnol is a cotton fabric grade specially formulated for use as a lubricated bearing material. It has enhanced wearing properties and dimensional stability and gives excellent performance in a multitude of bearing applications, using water as a lubricant, or more conventional oils or greases. The lower water absorption properties allow reduced clearances in bearings and also provide enhanced electrical insulation properties.

Applications

- Bearings
- Slideways
- Marine Bearings
- Pump Sleeve Bearings
- Seal Rings
- Mixer Bearings
- Slipper Pads

Availability

- Colour – Natural
- Type – Sheet & Rod
- Regularly produced in a wide variety of thicknesses

Typical Properties

Property	Units	Result
Cross Breaking Strength	MPa	110
Impact Strength, Notched, Charpy	kJ/m2	11.0
Compressive Strength, Flatwise	MPa	290
Compressive Strength, Edgewise	MPa	210
Shear Strength, Flatwise	MPa	100
Tensile Strength	MPa	58
Young's Modulus	GPa	6.6
Water Absorption:		
- 3mm thick	mg	45
- 6mm thick	mg	80
- 12mm thick	mg	100
Electric Strength, Flatwise in Oil at 90°C:		
- 3mm thick	MV/m	3.9
- 6mm thick	MV/m	3.5
Electrical Strength, Edgewise in Oil at 90°C	kV	15
Insulation Resistance after Immersion in Water	ohms	5x1010
Relative Density	-	1.32
Maximum Working Temperature:		

- Continuous	°C	120
- Intermittent	°C	130
Thermal Classification	-	Class E
Thermal Conductivity through Laminae	W/(mK)	0.29
Thermal Expansion in Plane of Laminae	X10-5/K	2.7
Specific Heat	kJ/(kgK)	1.5