

FTL172

✓ **General description:**

FTL172 is red moulded friction material composed with fibres. It has excellent mechanical characteristics, high compression strength and resistance to high temperatures. Specifically designed for hard working conditions. The material consists of phenolic resins with a NBR bonding system, short fibres, friction modifiers and fillers. **FTL172** is fully cured and suitable for bonding and riveting.

✓ **Application:**

FTL172 is suitable for applications with high mechanical resistance as toothed / geared friction discs, agricultural torque limiting devices, etc.

✓ **Bonding:**

FTL172 may be bonded using any of the established adhesives recommended for friction material. However, to obtain the best results it is necessary to use a thermosetting adhesive. The material is supplied ground on both surfaces, and so able to be bonded on either surface without any preparation providing it is kept clean.

✓ **Mating Surface**

A good quality, fine grained, pearlitic cast iron or cold rolled steel with a Brinell hardness between 150 - 200. Cast steels are not recommended.

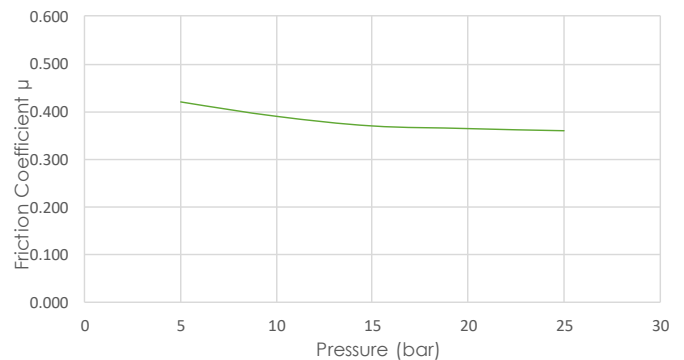
✓ **Recommended Operation Range:**

Max. continuous temperature 250 °C
 Max. intermittent temperature 350 °C

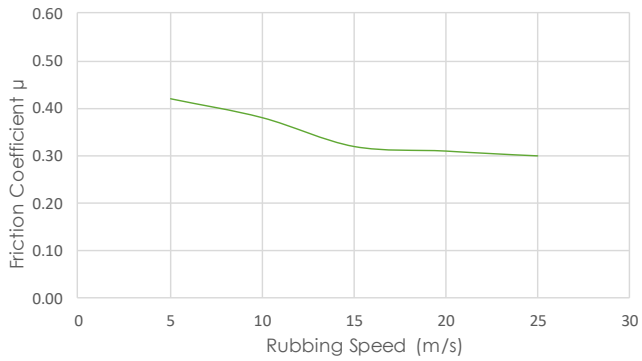
✓ **Technical Data**

Static Friction Coefficient (15bar, from the box)	0.42
Static Friction Coefficient (15bar, 100°C)	0.58
Dynamic Friction Coefficient (10bar, 10m/s)	0.6
Density (ASTM D792-91)	2 g/cm ³
Tensile Strength (ASTM D638-10)	26 N/mm ²
Compressive Strength (UNE-En ISO 844:2015)	177N/mm ²
Young Modulus (ASTMD 638-10)	7520N/mm ²
Poisson Coefficient:	0.17
Acetone extraction (ISO2859-1)	2.01
Ignition loss	41%
Hardness (Shore - D)	92
Wear Rate (79N, 7m/s)	63 mm ³ /Kwh
Fading temperature (100N, 11.5m/s)	335°C
Thermal Conductivity (ASTMD 638-10)	0.26W/m ² K

Friction Coefficient vs Pressure (Speed 10m/s; Temperature 100°C)



Friction Coefficient vs Rubbing Speed (Pressure 10 bar; Temperature 100°C)



The information supplied in this data sheet is believed to be accurate and reliable, was obtained by scientific and laboratory testing. However, since actual conditions of use are largely outside the control of Friction Technology Ltd, it is suggested that this material be thoroughly tested and its suitability for use be determined before final acceptance.