



## FTL172

FTL172 is a rigid moulded material available in sheet form. FTL172 material contains a range of short cut aramid fibres, with high quality cements and resins. It is a material with excellent mechanical strength and frictional characteristics.

### Applications

- o Various industrial applications.
- o Friction torque limiting applications.
- o Industrial gear tooth applications.

### Physical properties

- o Density g/cm 1.85-1.95
- o Hardness (SHORE-D) 88-92
- o Acetone extraction <2%
- o Ignition loss 38.44%

### Mechanical properties

- o Tensile strength N/mm<sup>2</sup> (ASTM D-638) 23.075
- o Compressive strength N/mm<sup>2</sup> 130.25  
10% (UNE 53205)
- o Ultimate compressive strength N/mm<sup>2</sup> (UNE 53205) 219.50

### Friction properties

- o Friction coefficient (dynamic)  $\mu$  (See graph) 0.40 $\pm$  0.05
- o Wear rate (@ 79N, 7m/s) F.A.S.T 50 - 75mm<sup>3</sup> /Kwh

### F.A.S.T. test conditions (max temperature).

The FAST is a 90-minute test at constant pressure and velocity, which reports response of friction coefficient vs temperature. These are maximum temperatures resistance before material lost coefficient

F=79N v=7m/s t=90min <250°C

F=100N v=11m/s t=40min <290°C

### Recommended operating temperatures (max):

- o Continuous operation 250°C
- o Intermittent operation 350°C

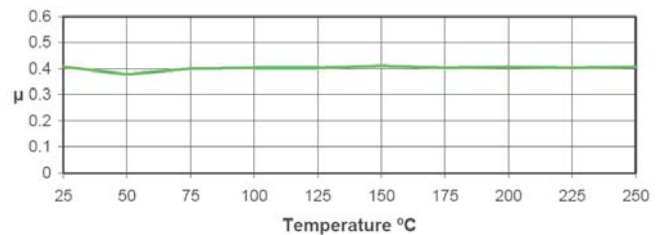
### Adhesives

The use of any well known thermosetting adhesive is recommended.

### Rubbing surfaces

Good quality, fine grained pearlitic cast iron with Brinell hardness of 150-200 is recommended.

$\mu$  (friction coefficient) vs temperature @79N/7m/s



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