



## Material: FTL175

### Description

Based on the FTL178 formulation, modifications have been made to the resin in order to increase the friction coefficient.

### Applications

- Friction washers
- Brakes pads
- Static brakes

### Physical properties

• Density g/cm	1.80-1.87
• Hardness (SHORE-D)	80-85
• Acetone extraction	<2.5%
• Ignition loss	42-44%

### Mechanical properties

• Tensile strength N/mm <sup>2</sup> (ASTM D-638)	11.97
• Compressive strength N/mm <sup>2</sup> 10% (UNE 53205)	58.5
• Ultimate compressive strength N/mm <sup>2</sup> (UNE 53205)	109.5

### Friction properties

• Friction coefficient (dynamic) $\mu$ (See graph)	0.45 $\pm$ 0.05
• Wear rate (@ 79N, 7m/s) F.A.S.T	45 - 85mm <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=45min	<320°C

### Recommended operating temperatures (max):

- Continuous operation 250°C
- 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

