

## D3731 Product Data Sheet

### General Description

D3731 is a rigid moulded, resin based material, containing non-asbestos mineral fibres in a random dispersion with selected friction modifiers. It has a medium coefficient of friction with a good resistance to fade and wear. Both surfaces are ground during manufacture so that it can be either bonded or riveted to brake shoes and metal parts. D3731 is not suitable for operating in oil.

### Applications

- Wind Turbine Brakes
- Industrial drum and band brakes, clutches and miscellaneous industrial devices
- Crane and excavator brake and clutch linings

### Bonding

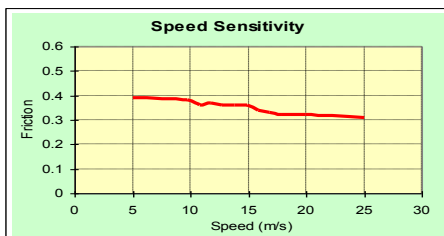
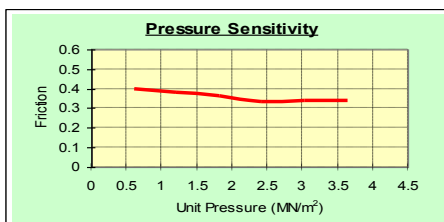
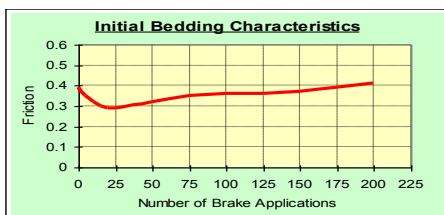
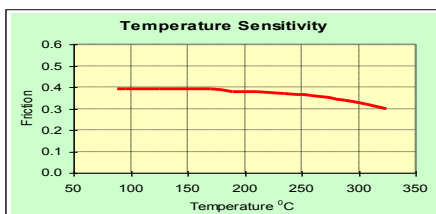
D3731 may be bonded using any of the established adhesives recommended for friction material. However, to obtain the best results it is necessary to use a thermosetting adhesive.

### Mating Surface

A good quality, fine grained, pearlitic cast iron or cold rolled steel with a Brinell hardness of 180. Cast steels are not recommended.

### Availability

Sheets 900mm x 700mm and 660mm x 530mm from 3.2mm to 32mm thick  
Customer specific pad configuration



### TECHNICAL DATA

#### Friction

μ for design purposes : Static (cold) 0.35  
Dynamic 0.40

#### Recommended Operating Range

Pressure : Static 70-2100 kN/m<sup>2</sup> (10-300 lbf/in<sup>2</sup>)  
Dynamic 70-860 kN/m<sup>2</sup> (10-125 lbf/in<sup>2</sup>)  
Max. rubbing speed 25 m/s (82 ft/s)  
Max. continuous temperature 180°C  
Max. intermittent temperature 275°C  
Max. temperature 325°C

### TEST CONDITIONS

#### Temperature Sensitivity

Application Speed 15 m/s  
Clamping pressure 0.61 MN/m<sup>2</sup> (88.5 lbf/in<sup>2</sup>)  
Temperatures ranging from 50 to 350°C in steps of 25°C

#### Initial Bedding

Application speed 15 m/s  
Clamping pressure 0.61 MN/m<sup>2</sup> (88.5 lbf/in<sup>2</sup>)  
Average Temperature 140°C

#### Pressure Sensitivity

Application speed 15 m/s  
Average temperature 80°C

#### Speed Sensitivity

Clamping pressure 0.61 MN/m<sup>2</sup> (88.5 lbf/in<sup>2</sup>)  
Average temperature 80°C

### PHYSICAL PROPERTIES

Density 1.85 g/cc minimum  
Ultimate tensile strength 15.2 MN/m<sup>2</sup> (2,200 lbf/in<sup>2</sup>)  
Ultimate compressive strength 59.2 MN/m<sup>2</sup> (8,600 lbf/in<sup>2</sup>)  
Ultimate shear strength 29.6 MN/m<sup>2</sup> (4,300 lbf/in<sup>2</sup>)

(All physical properties shown above are all mean values)

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 FEROTEC FRICTION LIMITED, it is suggested that this material be thoroughly tested and its suitability for use be determined before final acceptance.

Issue 11 Sept 11

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