

Friction Components and Systems Ltd

Product Data Sheet

Material Type: D3731

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 :

Recommended Operat-

Pressure : Static

Dynamic

Max. rubbing speed

Max. continuous temper-

Max. intermittent tem-

Max. temperature

TEST CONDITIONS

Temperature Sensitivity

Application Speed 15

Clamping pressure 0.61

Temperatures ranging

Initial Bedding

Application speed 15 m/s

Clamping pressure 0.61

Average Temperature

Pressure Sensitivity

Application speed 15 m/s

Average temperature

Speed Sensitivity

Clamping pressure 0.61

Average temperature

PHYSICAL PROPER-

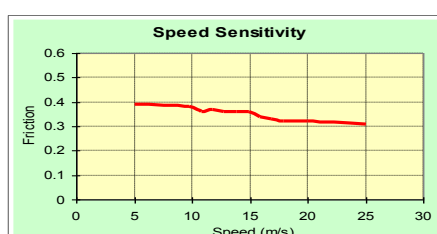
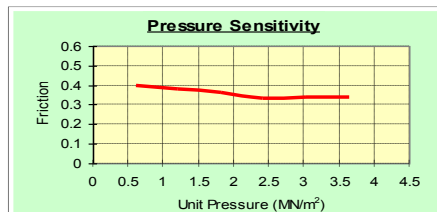
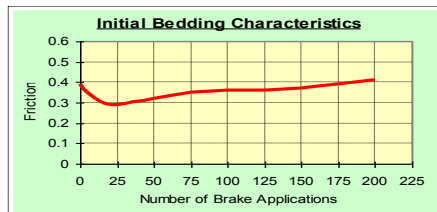
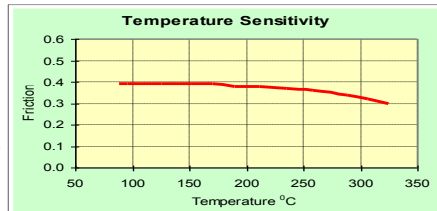
Density

Ultimate tensile strength

Ultimate compressive

Ultimate shear strength

(All physical properties



Static (cold) 0.35
Dynamic 0.40

ing Range

70-2100 kN/m² (10-300 lbf/in²)

70-860 kN/m² (10-125 lbf/in²)

25 m/s (82 ft/s)

180°C

ature

perature 275°C

325°C

m/s

MN/m² (88.5 lbf/in²)

from 50 to 350°C in steps of 25°C

MN/m² (88.5 lbf/in²)

140°C

80°C

MN/m² (88.5 lbf/in²)

80°C

TIES

2.10 g/cc minimum

15.2 MN/m² (2,200 lbf/in²)

strength 127.6 MN/m² (18,500 lbf/in²)

29.6 MN/m² (4,300 lbf/in²)

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 FRICTION COMPONENTS AND SYSTEMS LTD, it is suggested that this material be thoroughly tested and its suitability for use be determined before final acceptance.

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