

## D9010 Product Data Sheet

### General Description

**D9010** is a non-asbestos woven material manufactured from finely carded yarns containing brass wire. Its construction combined with the resins used provide a dense, tough material with particularly good resistance to heat and compression under load. **D9010** is suited for light to heavy duty operating conditions against quality steel and cast iron mating surfaces. It is oil and grease resistant and is suitable for light to medium duty in oil-immersed conditions. To help during fitting to brake shoes and bands it can be softened and made more pliable by warming in an appropriate oven to between 150 & 180°C for sufficient time for the heat to penetrate the fabric.

### Applications

Industrial drum and band-brakes  
Industrial clutches  
Marine towing winches  
Oil immersed steering brakes  
Miscellaneous industrial devices

### Bonding

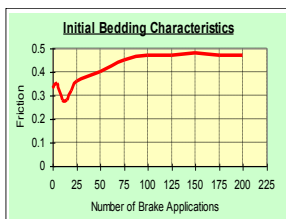
**D9010** may be bonded using any of the established adhesives recommended for friction material. However, to obtain the best results it is necessary to use a thermosetting adhesive.

### Mating Surface

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

### Availability

- Roll
  - Length 7.5 Metres
  - Width 20 to 330mm
  - Thickness range 3.2mm to 19mm
- Sheet size 6600mm x 660mm x 4.8 to 16.0mm thick
  - Linings and special shapes on request



### TECHNICAL DATA

#### Friction

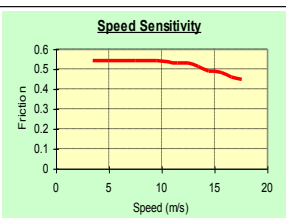
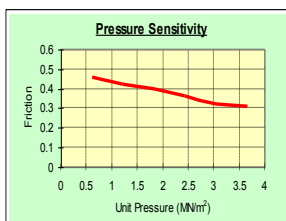
$\mu$ for design purposes :	Static (cold)	0.50
	Static (in oil)	0.12 - 0.15
	Dynamic (dry)	0.42
	Dynamic (in oil)	0.08 - 0.12

#### Recommended Operating Range

Pressure	Dynamic (dry)	70-1,400 kN/m <sup>2</sup> (10 - 200 lbf/in <sup>2</sup> )
	Dynamic (in oil)	350-1,750 kN/m <sup>2</sup> (50 - 250 lbf/in <sup>2</sup> )
	Static	70-3,500 kN/m <sup>2</sup> (10-500 lbf/in <sup>2</sup> )
Max. rubbing speed	18 m/s	
Max. continuous temperature	180°C	
Max. intermittent temperature	275°C	
Max. temperature	300°C	

#### Test Conditions

Application Speed	15m/s	
Clamping pressure	0.61 MN/m <sup>2</sup> (88.5 ibf/in <sup>2</sup> )	
Average temperature	Initial Bedding	140°C
	Pressure Sensitivity / Speed Sensitivity	80°C



### PHYSICAL PROPERTIES

Density	1.60 g/cc
Ultimate tensile strength	31.0 MN/m <sup>2</sup> (4,500 ibf/in <sup>2</sup> )
Ultimate compressive strength	5.2 MN/m <sup>2</sup> (750 ibf/in <sup>2</sup> )
Ultimate shear strength	43.4 MN/m <sup>2</sup> (6,300 ibf/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 4 Jun 10