

## D3906 Product Data Sheet

### General Description

D3906 is a rigid moulded non-asbestos material, having a basis of inorganic fibres. It contains no metallic particles and is grey in colour. D3906 is a low friction material with excellent wear resistance. It has been designed specifically for applications where a smooth and noise free operation is required. Although not affected physically by minor oil contamination this material is unsuitable for operating under oil-immersed conditions.

### Applications

Industrial brakes  
Industrial clutches  
Miscellaneous industrial devices

### Bonding

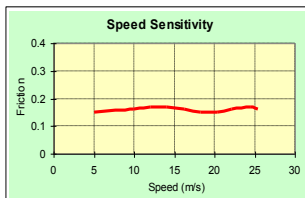
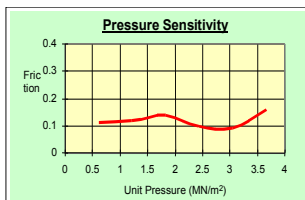
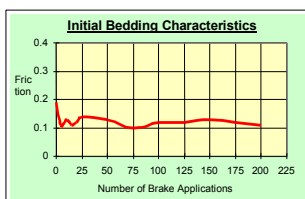
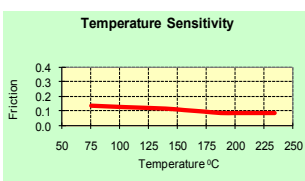
D3906 may be bonded using any of the established adhesives recommended for friction material. However, to obtain the best results it is necessary to use a thermosetting adhesive.

### 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

- Sheet size 900mm x 700mm x 3.2 up to 25.4mm thick
- Sheet size 660mm x 530mm x 3.2 up to 25.4mm thick
- Special shapes and discs on request



### TECHNICAL DATA

#### Friction

$\mu$ for design purposes :	Static (cold)	0.12
	Dynamic	0.15

#### Recommended Operating Range

Pressure	Dynamic	70-700 kN/m <sup>2</sup> (10-100 ibf/in <sup>2</sup> )
	Static	70-2,410 kN/m <sup>2</sup> (10-350 ibf/in <sup>2</sup> )

Max. rubbing speed	25 m/s
Max. continuous temperature	150°C
Max. intermittent temperature	180°C
Max. temperature	230°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 80°C
Average temperature	Pressure Sensitivity / Speed Sensitivity 80°C

### PHYSICAL PROPERTIES

Density	1.80 g/cc
Ultimate tensile strength	24.0 MN/m <sup>2</sup> (3,500 ibf/in <sup>2</sup> )
Ultimate compressive strength	110.0 MN/m <sup>2</sup> (16,000 ibf/in <sup>2</sup> )
Ultimate shear strength	28.0 MN/m <sup>2</sup> (4,000 ibf/in <sup>2</sup> )
GogonHardness	Below 25Gc
Thermal Conductivity	2.22 W/m°C

(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.

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