Ferotec Friction Ltd

D3501 Product Data Sheet

General Description

D3501 is a rigid moulded friction material, having a non asbestos basis of synthetic fibres in random dispersion. It contains no metallic particles and is grey in colour. D3501 possesses high physical strength, and facings can be gear-cut on either the inside or outside circumference if required. It has a medium coefficient of friction with low wear and is suitable for use at medium to heavy duty levels . Although not affected physically by minor oil contamination this material is unsuitable for operating under oil-immersed conditions.

Applications

- **Clutches for marine gearboxes**
- **Steering clutches**
- **Clutches for machine tools, presses and other industrial plant and machinery**
- **Miscellaneous industrial devices**

Bonding

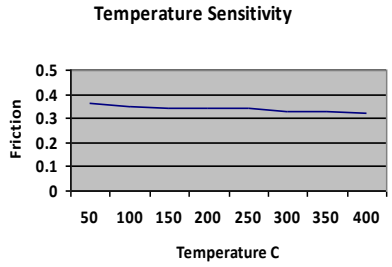
D3501 may be bonded using any of the established adhesives recommended for friction material. However, to obtain the best results it is necessary to use a thermosetting adhesive. Care should be taken to ensure that the temperature to which the material is to be subjected does not exceed the recommendations of the adhesive manufacturer.

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

Sheets 660 x 530mm up to 65mm thick
Sheets 900 x 700mm up to 25.4mm thick
Special shapes on request
Discs on request



TECHNICAL DATA

Friction

μ for design purposes :	Static (cold)	0.34
	Dynamic	0.32

Recommended Operating Range

Pressure :	Dynamic	70-700kN/m²	(10-100l bf/in²)
	Static	70-2,410kN/m²	(10-350l bf/in²)
Max. rubbing speed		18 m/s (60 ft/s)	
Max. continuous temperature		300°C	
Max. intermittent temperature		400°C	
Max. temperature		450°C	

PHYSICAL PROPERTIES

Density	1.95 g/cc
Ultimate tensile strength	27.6 MN/m² (4,000 lbf/in²)
Ultimate shear strength	23.4 MN/m² (3,400 lbf/in²)
Ultimate compressive strength	138 MN/m² (20,000 ibf/in²)
Ultimate crossbreak strength	69.0 MN/m² (10,000 ibf/in²)
Thermal conductivity	0.9 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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Ferotec Friction Ltd
Unit C Greenfield Business Park, Bagillt Rd, Holywell, Flintshire CH8 7HJ, United Kingdom
Tel: +44 1352 710360 Fax: +44 1352 719368 E-mail: ffsales@ferotecfriction.co.uk Website: www.ferotecfriction.com