ACTOM

MECHANICAL EQUIPMENT

Products

Friction Linings

D3806

ARDOT

Vibration & Rubber
Engineering Solutions

Ferotec Friction Ltd

D3806 Product Data Sheet

General Description

D3806 is a closely woven, semi-flexible friction material. It is based on yarn spun from a blend of glass and synthetic fibres together with a fine copper wire to enhance its strength and heat dissipation properties. The impregnant has been specially developed to give it good frictional properties combined with a good degree of flexibility. It has a high coefficient of friction and performs well in wet and damp environments which makes it particularly suited for marine applications. To help during fitting to brake shoes and bands it can be softened and made more pliable by warming in a bonding 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
Miscellaneous industrial devices

Bonding

D3806 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

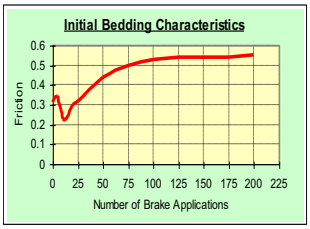
A good quality, fine grained, pearlitic cast iron or cold rolled steel with a Brinell hardness of 180. Cast steels are not recommended.

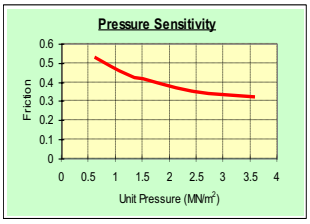
Availability

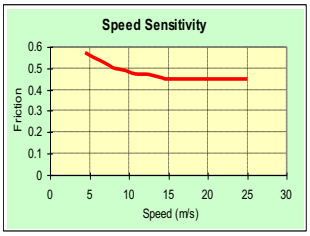
- Roll

Length	10 Metres
Width	20 to 510mm
Thickness range	3.2mm to 20mm

- Sheet size 1000mm x 660mm x 4.8 to 16.0mm thick
- Linings and special shapes on request







TECHNICAL DATA

Friction

μ for design purposes :	Static (cold)	0.45
	Dynamic	0.42

Recommended Operating Range

Pressure	Dynamic	70-860 kN/m²
	Static	70-2,410 kN/m²
Max. rubbing speed	25 m/s	
Max. continuous temperature	110°C	
Max. intermittent temperature	180°C	
Max. temperature	225°C	

Test Conditions

Application Speed	15m/s		
Clamping pressure	0.61 MN/m³ (88.5 ibf/in²)		
Average temperature	Initial Bedding	140°C	
Average temperature	Pressure Sensitivity / Speed Sensitivity		80°C

PHYSICAL PROPERTIES

Density	1.20 g/cc
Ultimate tensile strength	24.0 MN/m² (3,500 ibf/in²)
Ultimate compressive strength	100.0 MN/m² (14,500 ibf/in²)
Ultimate shear strength	17.2 MN/m² (2,500 ibf/in²)
Rivet holding capacity	61.8 MN/m² (9,000 ibf/in²)
Thermal conductivity	0.79 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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