

Friction Components and Systems Ltd

Product Data Sheet

Material Type: MZ GOLD

General Description

MZ Gold is a solid woven friction material. It is based on yarn spun from a blend of fiberglass and synthetic fibres together with fine brass wires to enhance its strength and heat dissipation properties. The impregnant has been specially developed to give it good frictional properties combined with a fair degree of flexibility. It has a high coefficient of friction with excellent fade resistance and is particularly suitable for mine winder brakes. It is recommended for operation in oil immersed 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 brake linings
Mine winder brake linings

Bonding

MZGOLD 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

<u>Roll</u>		<u>Sheet</u>
Length	10.0 Metres	Sheet size 1000mm x 660mm x 3.2mm to 12.7mm thick
Width	20 to 510mm	
Thickness range	3.2mm to 12.7mm	Linings and special shapes available on request

TECHNICAL DATA

Friction

μ for design purposes :	Normal	0.50
	Hot	0.48
	Static @ 100°C	0.48
	Static @ 200°C	0.42

Recommended Operating Range

Pressure	Dynamic	0.1—1.00 MPa
Max. rubbing speed	25 m/s	
Max. continuous temperature	150°C	
Max. intermittent temperature	200°C	
Max. temperature	300°C	

PHYSICAL PROPERTIES

Density (SAE J380)	1.36-1.42 g/cc
Ultimate tensile strength	TBD
Ultimate compressive strength	135 MPa
Ultimate shear strength	TBD
Wear Rate in ³ /hp-hr	0.086

(All physical properties shown above are all mean values)

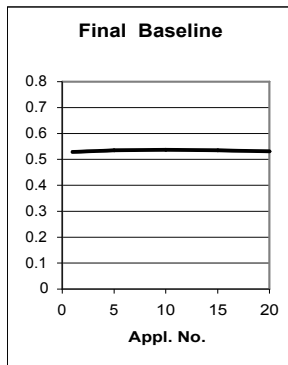
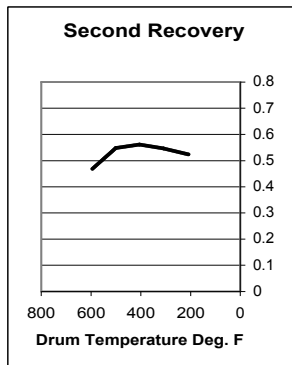
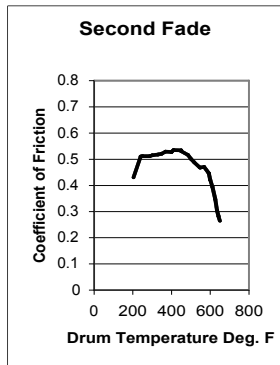
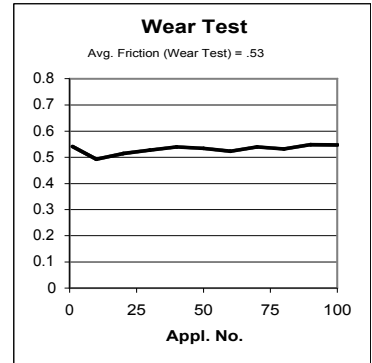
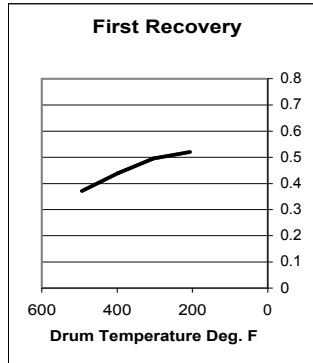
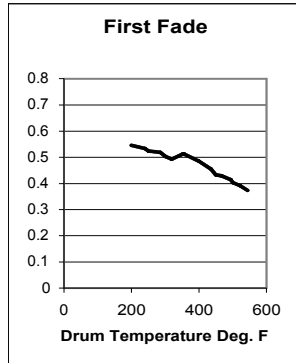
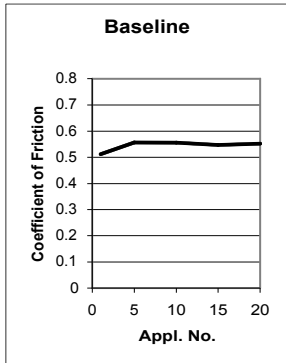
The information supplied in this data sheet is believed to be accurate and reliable, and was obtained by scientific and laboratory testing. However, since actual conditions of use are largely outside the control of FRICTION COMPONENTS AND SYSTEMS LTD, it is suggested that this material be thoroughly tested and its suitability for use be determined before final acceptance.

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SAE J661A (150 PSI)

Material Type
 Test No. 25-09
 Date 04/09/09
 Material MZGOLD (Catai)
 Lot
 Reference

Wear Data

	Weight	Thickness
	Grams	Inches
Start	4.950	0.219
Finish	4.620	0.196
Loss	0.330	0.023
%	6.67	10.52
Ave. Fric - N	0.50 G	
Ave. Fric - H	0.48 G	
Cu in/HP hr	0.0086	

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