Ferotec Friction, Inc.

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PRODUCT DATA SHEET

FRICTION MATERIAL COMPOSITE:

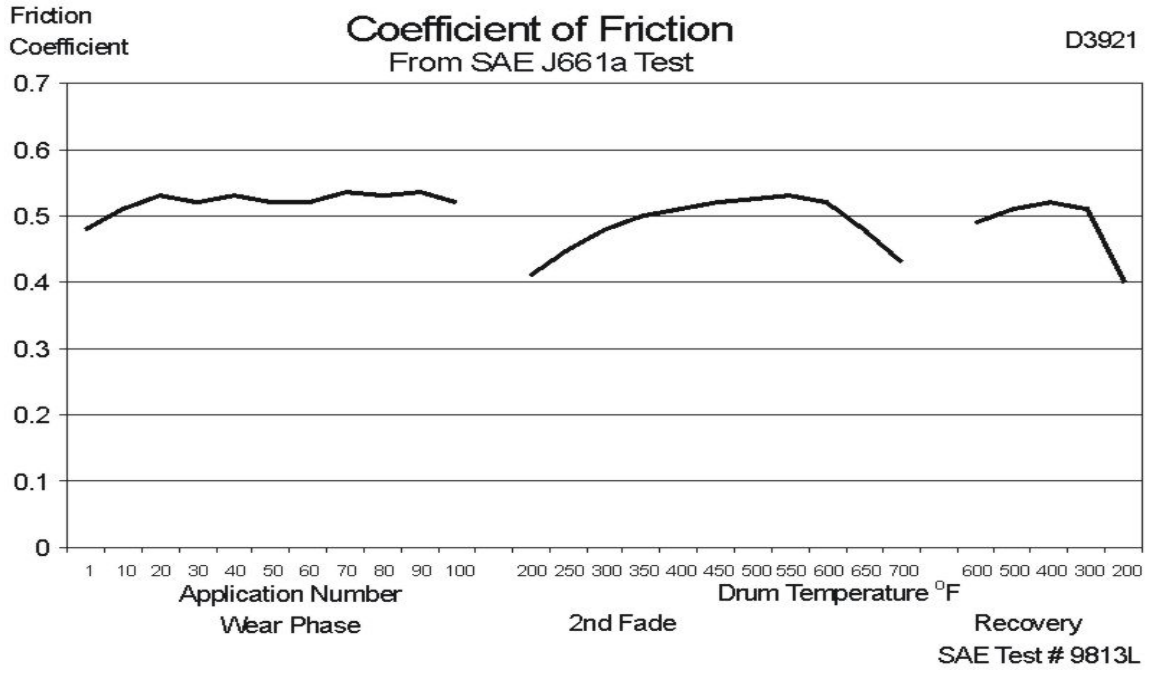
D3920/D3921

PRODUCT DESCRIPTION: D3921 is a rigid molded friction composite containing steel filaments in a random dispersion to enhance its heat dissipation and strength properties. **D3921** is also available as a semi-cured, semi-flexible roll form identified as **D3920**.

APPLICATION: D3921 is suggested for industrial drum and band brakes as well as crane and excavator brake and clutch linings. It may be bonded using any of the established adhesives recommended for friction materials. For best results, a thermosetting adhesive is strongly recommended. Good quality, fine grained, pearlitic cast iron or cold rolled steel mating surfaces are recommended with a Brinell hardness of 200. While not affected by slight oil/grease contamination, **D3921** is not recommended for operation in oil.

PHYSICAL PROPERTIES		
Available Sizes (1)		
Thickness, inches		0.062 to 1.40
Slab Size, inches W x L		15 x 24
Roll Length, feet		16 or 24 (thickness dependant)
Specific Gravity	SAE J380	2.30
Apparent Density, pounds/in^3		0.0831
Hardness, Shore D	SAE J379	D3920 S/C 55-70 D3921 F/C 70 - 80
(1) Special sizes available on request		
MECHANICAL PROPERTIES		
Tensile Strength, psi	ASTM D638	2170
Flexural Strength, psi	ASTM D790	TBD
Compression Strength, psi	ASTM D695	13500
Shear Strength, psi	ASTM D732	1750
THERMAL PROPERTIES		
Conductivity, W/m^{o}C	ASTM D2214	1.034
Specific Heat, Cal/gm/^{o}C	ASTM C351	TBD

FRICTION PROPERTIES		
Coefficient of Friction (2)	SAE J661	
Normal		.47
Hot		.50
@ 400°F		.52
Static @ 200°F		.52
@ 400°F		.48
Wear Rate, in^3/hp-hr		0.0075
Friction Code	SAE J866	GG
Recommended Operating Limits (3)		
Maximum Unit Pressure, psi		250
Maximum Rubbing Speed, ft/min		3500
Temperature, °F		
Minimum		-10
Maximum (Intermittent)		550
Maximum (Continuous)		400
(2) Data derived from SAE J661a dynamometer test results.		
(3) Recommended operating limits are commensurate with a reasonable amount of wear and uniform performance.		



NA = not available
N/A = not applicable
NR = not recommended
TBD = to be determined

The information and data supplied in this data sheet are believed to be accurate and reliable, and were obtained from standard laboratory tests. Since actual conditions of use are not within the control of **Ferotec Friction**, it is suggested that **D3920** be thoroughly tested and its suitability for use be determined before final acceptance.