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BRAKE and CLUTCH COMPOSITE: AFT100NM

PRODUCT DESCRIPTION and APPLICATION: AFT100NM is a non-metallic medium-high coefficient friction composite supplied in flat slabs or molded parts. AFT100NM provides excellent fade resistance and a low wear rate, a good choice for industrial and off-road applications. AFT100NM is frequently used in hydro-electric applications for its non-metallic properties. AFT100NM is easily machined using industry-accepted practices.

PHYSICAL PROPERTIES -	·	
Specific Gravity, typical	1.6914	SAE – J380
Apparent Density, pounds / in²	0.065 - 0.067	
Maximum Available Size -		
Width	38"	
Thickness	1.5"	
Length	38"	

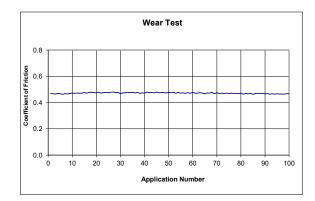
MECHANICAL and THERMAL PROPERTIES -		
Tensile Strength, psi	3150	ASTM - D638
Modulus x 10 ⁶	1.90	
Elongation, %	0.15	ASTM - D790
Flexural Strength, psi	5625	
Modulus x 10 ⁶	0.50	
Compression Strength, psi	17,750	ASTM - D695
Shear Strength, psi	5220	ASTM - D732
Thermal Conductivity, BTU-in/hr/ft²/°F	To Be Determined	ASTM - D256

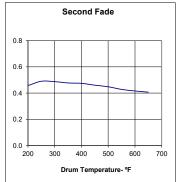
FRICTION PROPERTIES -		
Coefficient of Friction -		SAE J661
Normal	0.48	
Hot	0.43	
Typical @ 400°F.	0.47	
Wear Rate, in³/hp-hr	0.0081	
Friction Code	GF	SAE J866
Suggested Operating Limits - **		
Maximum Pressure, psi	250	
Maximum Surface Speed, ft/min	5000	
Temperature, °F.		
Maximum, Intermittent	650°F.	
Maximum, Sustained	550°F.	

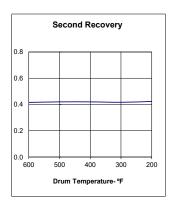
^{**} Suggested operating limits are consistent with uniform performance and acceptable wear rate

Coefficient of Friction

From SAE J661 Test Procedure







The data presented herein was obtained from industry accepted standards. **Champion Friction Technologies Inc.** provided the information in good faith but make no representation as to its completeness or accuracy. The information is intended only as a guide, and independent judgement must be exercised in determining suitability of the material for a particular purposes.

PDS100NM Rev: 11/2022