

ProTec Friction Supply
Non-Scoring Heavy Duty Sheet Lining

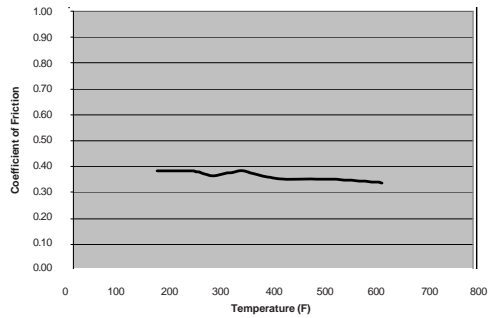
THERMOFIBER 4511

THERMOFIBER 4511 is a non-scoring, graphitic brake and clutch friction composite especially designed to run against copper, as well as cast iron and steel surfaces where low coefficients are required. It is ideal for use in aluminum and glass factories or any application which utilizes long run-out tables.

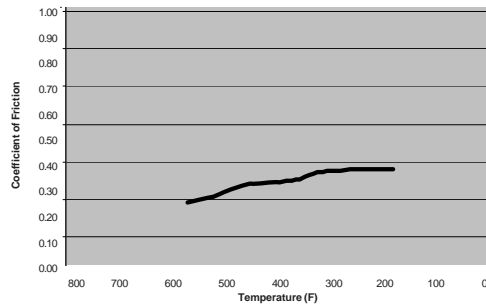
THERMOFIBER 4511 is resistant to fade and shows exceptional thermal stability, maintaining its friction level through the range of operating temperatures.

THERMOFIBER 4511 is available in sheet sizes up to 40" x 40" and is highly-machinable for special pieces and sizes.

Second Fade Test



Second Recovery Test



TECHNICAL DATA

COLOR	Dark Gray
STRUCTURE	Rigid
COMPOSITION	
Metallic	No
Aramid	No
MAIN FIBER	Glass
TYPE OF SERVICE	Dry
COEFFICIENT OF FRICTION¹	0.325 Normal 0.300 Hot
WEAR RATE²	.0054 (in ³ /hp-hr)
SHEAR IMPACT STRENGTH	4,800 (ASTM D732)
MECHANICAL RESISTANCE	
Tensile Strength	2,350 (ASTM D638-91)
Flexural Strength	5,200 (ASTM D790-97)
Compressive Strength	13,400 (ASTM D695-91)
Shear Strength	
HARDNESS	85
SPECIFIC GRAVITY	2.00
MAX. RUBBING SPEED³	5,000 ft/min
MAX. DRUM TEMPERATURE²	650 F.
MAX. PRESSURE	300 psi
AVAILABLE FORMS	
Radius Block	
Gear Tooth Facings	
Disc Brake Pad	
Clutch Facings & Buttons	
Roll Lining	
Flat Sheet	Yes
Special Molded Piece	Yes



¹-According to CHASE Test SAE-J661-A, Note: Tested by Link Testing Laboratories-Michigan-USA. ² Values calculated 400 F (204 C), 150 PSI, 20 ft/sec data point is typical of standard operating conditions, not the maximum limits of the compound. Wear rates vary with changes in temperature, pressure, and speed. Parameters- excellent: 0.006/0.008, good: 0.009/0.011 moderate; +0.012 ³- Feet/Min constant operation

ProTec
STRATEGIC FRICTION

45 Kensico Drive, Mt. Kisco, NY 10549
T (914) 244-3600 F (914) 244-3615

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