



Friction & Phenolic Specialists

# Product Data Sheet: SM005

## PRODUCT DESCRIPTION

SM005 is a rigid molded *semi-metallic* friction material suitable for use in *Medium Friction*, high temperature and high energy brake or clutch applications in a wide variety of equipments. It can be molded into many intricate internal, external, and customer specified shapes.

## CHARACTERISTICS

- Exceptional dimensional and thermal stability
- Excellent corrosion resistance
- Uniform coefficient of friction at high temperatures
- Excellent wear rate.

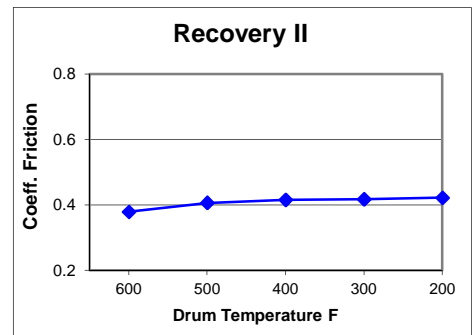
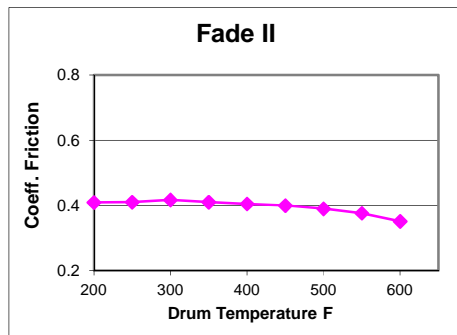
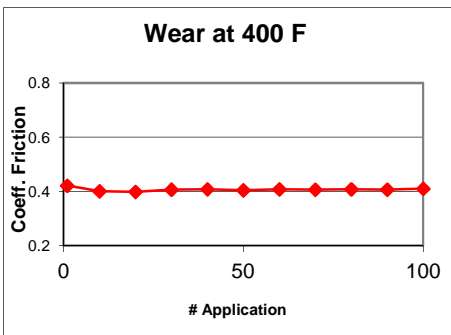
## MECHANICAL PROPERTIES

Specific Gravity (SAE J380) : 2.34 – 2.41  
 Gogan Hardness (SAE J379A) : 32-33

## FRICITIONAL PROPERTIES

Coefficient of Friction (SAE J661):  
 Normal\* : 0.41  
 Hot\* : 0.39  
 Wear Rate (SAE J661) (inch<sup>3</sup>/hp-hr) : 0.002<sub>max</sub>  
 Friction Code : FF  
 Maximum Operating Limits:  
 Rubbing Speed\*\* : 7500 fpm  
 Pressure\*\* : 2000 psi  
 Drum Temperature for Constant Operation\*\* : 650°F

## SAE J661A TEST CURVES



\*Note 1. – Friction values shown are for guide purposes only since values deviate with changes in temperature, pressure and speed. Practical design should include a 25 to 50 percent safety factor.

\*\*Note 2. – Rubbing speed, drum temperature, and pressure are directly related. Changing any one value will change the others. The values shown represent typical conditions, but are not the ultimate limits of the material.