

Product Data Sheet: SM003

PRODUCT DESCRIPTION

SM003 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 ranging from light aircraft to cranes. It can be molded into many intricate internal, external, and customer specified shapes.

CHARACTERISTICS

- Exceptional dimensional and thermal stability
- High tensile strength
- Uniform coefficient of friction at high temperatures
- Excellent wear rate.

MECHANICAL PROPERTIES

Specific Gravity (SAE J380) :3.15-3.25

Gogan Hardness (SAE J379A) : 13-16

Tensile Strength, PSI (ASTM D638) : 2000 min

FRICTIONAL PROPERTIES

Coefficient of Friction (SAE J661):

Normal* : 0.43 Hot* : 0.42

Wear Rate (SAE J661)

(inch³/hp-hr) : 0.002_{max}

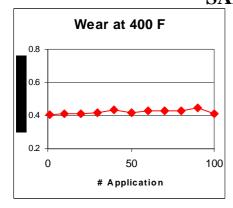
Friction Code
Maximum Operating Limits:

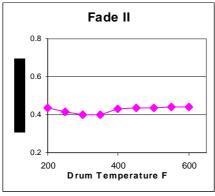
Rubbing Speed** : 10000 fpm Pressure** : 2000 psi

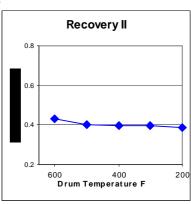
Drum Temperature for

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.