Product Data Sheet: SM-002

PRODUCT DESCRIPTION

SM-002 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
- High tensile strength
- Excellent corrosion resistance
- Uniform coefficient of friction at high temperatures
- Excellent wear rate.

MECHANICAL PROPERTIES

Specific Gravity (SAE J380) : 2.80
Gogan Hardness (SAE J379A) : 16-22
Tensile Strength, PSI (ASTM D638) : 6000 min

FRICIONAL PROPERTIES

Coefficient of Friction (SAE J661):
  Normal* : 0.42
  Hot* : 0.42
Wear Rate (SAE J661) (inch³/hp-hr) : 0.003 max
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.