

TF1890 was especially developed for OE applications. It is one of our strongest rigid molded materials, with GG level friction. TF1890 contains glass and ceramic fiber reinforcers, along with brass chips for superior heat dissipation.

### Friction Properties

Static Friction Coefficient (15bar, from box):  $0.51 \pm 0.05 \mu$   
 Static Friction Coefficient (15bar, 100°C):  $0.489 \pm 0.05 \mu$   
 Dynamic Friction Coefficient:  $0.45 \pm 0.05 \mu$   
 Rubbing Speed 35 m/s (116 Ft/sec)  
 Wear Rate [mm<sup>3</sup>/kWh]:  $75 \pm 10$  (at 150°C)

### Physical Properties

Hardness (DIN53505): 90±5 ShoreD  
 Specific Gravity (ASTMD792):  $1.9 \pm 0.05$  gr/cm<sup>3</sup>  
 Ignition Loss (ASTM D-2524):  $40 \pm 2\%$   
 Tensile Strength (ASTM D638): 3690  
 Compressive Strength (ISO 844:2014): 210960

### Thermal Properties

Contact Protec for information.

### Material Type: Molded Rigid Friction Material

#### Appearance/Formats:

Rolls & Flat Sheets  
 Gear Tooth Facings  
 Clutch Facings & Buttons

#### Applications

Miscellaneous Industrial Brakes & Clutches  
 Medium Vehicle Brakes  
 Heavy Duty Static Applications  
 Forging Machinery  
 Ring Segments

### Compliance: Reach(EC)1907/2023 & RoHS2015/863/EU

#### Additional

Recommended Mating Surfaces: Pearlitic Cast Iron with  
 Recommended Adhesive: Thermosetting.  
 Oil Resistant: Yes.

The above data is taken from specific test parameters, therefore results can vary in differing application conditions

