

TF1700 is a high-performance material containing a significant percentage of Kevlar (aramid fiber) with metallic content. TF1700 virtually eliminates clutch slippage with a high torque capacity that avoids uncontrollable glazing. Additionally, TF1700 exhibits extraordinary wear life properties and has a high friction coefficient. When given a mating surface, clutch flywheel, brake rotor, or brake drum, it will dramatically outlast organic friction wear performance. TF1700 is completely non-abrasive against mating surfaces, promotes smooth engagement, resists very high surface pressures at the brake interface, and is an effective alternative for sintered materials since it handles high energy inputs in both dry and oil-immersed applications. TF1700 is available in sheets and in finished custom shapes and sizes, with thicknesses as low as 0.5mm.

Friction Properties

Static Friction Coefficient (15bar, from box): $0.40 \pm 0.05 \mu$
 Static Friction Coefficient (15bar, 100°C): $0.65 \pm 0.05 \mu$
 Dynamic Friction Coefficient: $0.65 \pm 0.05 \mu$
 Wear Rate [mm^3/kWh]: 60 (at 150°C/302°F)
 T Fading: > 500°C/932°F

Physical Properties

Hardness (DIN53505): 85 ± 5 ShoreD
 Specific Gravity (ASTMD792): 1.27 ± 0.01
 Tensile Strength (ASTM D638): 70 ± 5 N/mm²
 Compressive Strength (ISO 844:2014): 300 ± 10
 Burst Resistant (200 x 137 x 3.5) 200°C: 18200 ± 200 RPM
 Poisson Coefficient (ASTM D638): 0.27 ± 0.03
 Young's Modulus (ASTM D638): 7200 ± 100

Thermal Properties

Maximum Continuous Operating Temp: 300/572 C°/F°
 Maximum Intermittent Operating Temp: 450/842 C°/F°

Material Type: Paper Friction

Appearance/Formats:

Rings
 Gears
 Bonded Parts

Applications

High Performance Motorsport Clutches
 Clutch Rings & Buttons
 Extreme-Duty Industrial Brakes & Clutches
 Other Off-Road Extreme-Use Brakes & Clutches
 Robotics Brakes & Clutches

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

Additional

Recommended Mating Surfaces: Pearlitic Cast Iron with Hardness HB150-200.
 Recommended Adhesive: Thermosetting.
 Oil Resistant: Yes.

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

