

TF1820 is our latest generation molded roll lining designed to maximize the strength and integrity of gear tooth facings and agricultural torque-limiting devices. TF1820 is capable of withstanding significant shear and tensile forces due to high-fiber content along with proprietary fiber alignment technology, to enhance heat dissipation and polish mating surfaces. The material consists phenolic resins, short fibers, friction modifiers, and fillers, with an NBR bonding. Fully cured and suitable for bonding and riveting.

Friction Properties

Static Friction Coefficient (15bar, from box): $0.55 \pm 0.05 \mu$
 Static Friction Coefficient (15bar, 100°C): $0.59 \pm 0.05 \mu$
 Dynamic Friction Coefficient: $0.40 \pm 0.05 \mu$
 Rubbing Speed 25 m/s (130 Ft/sec)
 Wear Rate [mm^3/kWh]: 75 ± 10 (at 150°C)

Physical Properties

Hardness (DIN53505): 90 ± 5 ShoreD
 Specific Gravity (ASTMD792): $1.9 \pm 0.05 \text{ gr/cm}^3$
 Ignition Loss (ASTM D-2524): $40 \pm 2\%$
 Tensile Strength (ASTM D638): $30 \pm 5 \text{ N/mm}^2$
 Compressive Strength (ISO 844:2014): $30 \pm 5 \text{ N/mm}^2$
 Poisson Coefficient (ASTM D638): 0.24 ± 0.03
 Young's Modulus (ASTM D638): $8400 \pm 100 \text{ N/mm}^2$

Thermal Properties

Maximum Continuous Operating Temp: $300/570 \text{ C}^\circ/\text{F}^\circ$
 Maximum Intermittent Operating Temp: $400/750 \text{ C}^\circ/\text{F}^\circ$

Material Type: Molded Flexible 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

