

ID Material:
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TF1820

TF1820 is red molded friction material composed with fibres. It has excellent mechanical characteristics, high compression strength and resistant to high temperatures. Specially designed for hard working conditions. The material consists phenolic resins with a NBR bonding system, short fibres, friction modifiers and fillers. NT-DV is fully cured and suitable for bonding and riveting.

Material Data

Friction Properties (according to graphics)

Static Friction Coefficient (15bar, from box):	0.55±0.05	μ
Static Friction Coefficient (15bar, 100oC):	0.59±0.05	μ
Dynamic Friction Coefficient (10bar, 10m/s):	0.40±0.05	μ
Wear Rate (10bar, 15m/s):	75±10	mm ³ /Kwh
To Fading (10bar, 10m/s):	>350°C	°C

Physical Properties

Hardness (DIN53505):	90±5	Shore-D
Specific Gravity (ASTM D792-91):	1.9±0.05	gr/cm3
Ignition Loss (ASTM D-2524):	40±2	%
Acetone Extraction ISO2859-1:	2±0.2	%
Thermal Conductivity (ASTM E1952-01):	0.27±0.1	W/m ² K

Mechanical Properties

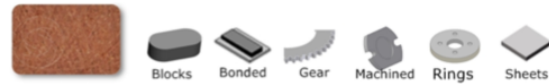
Tensile Strength (ASTM D638-10):	30±5	N/mm ²
Compressive Strength (UNE 53205):	175±5	N/mm ²
Poisson Coefficient:	0.24±0.03	
Young Modulus (ASTMD 638-10):	8400±100	N/mm ²

Recommended Working Values

T° Max. Continuous Operation:	300	°C
T° Max. Intermittent Operation:	400	°C

Material Type : Rigid material

Appearance / Formats



Applications

Brake blocks - Forging machinery - Heavy duty static applications - Industrial clutches - Punch-die press blocks - Rings segments for machinery - Torque limiter -

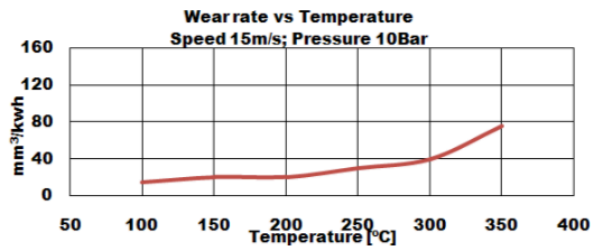
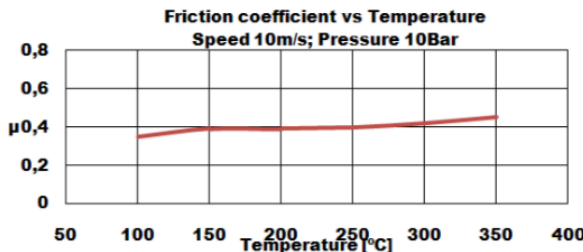
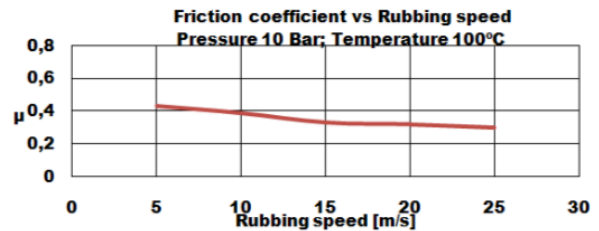
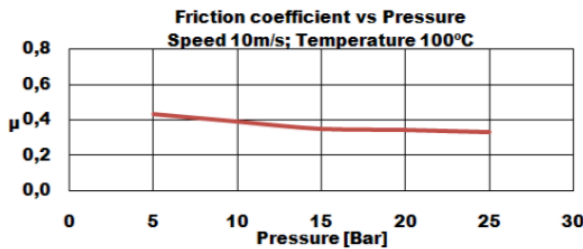
Price Level : \$ \$ \$ \$

Reach (EC) 1907/2006 - RoHS 2011/65/EU : Compliance

Others

Recommended Mating Surface: Perlitic cast iron, hardness HB150-200
Recommended Adhesives: Thermosetting adhesive
Oil Resistant: Yes

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



Rubbing speed, temperature and pressure are related. Changing any values will change other. The values shown represent typical conditions, but are not ultimate limits of the material.