

ID Material: 16
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TF4242

TF4242 is a soft-flexible friction material that performs with a high friction coefficient. Its flexibility allows it to work noiseless while producing a minimum wear on working surfaces. The material consists phenolic resins with a NBR rubber bonding system, short and brass fibers, friction modifiers and fillers. TF4242 is fully cured and suitable for bonding and riveting.

Material Data

Friction Properties (according to graphics)

Static Friction Coefficient (15bar, from box):	0.65±0.05	μ
Static Friction Coefficient (15bar, 100oC):	0.50±0.05	μ
Dynamic Friction Coefficient:	0.5±0.05	μ
Wear Rate:	30 (at 302 °F)	μ
T° Fading:	>662	°F

Physical Properties

Hardness (DIN53505):	55±5	Shore-D
Specific Gravity (ASTM D792):	1.70±0.05	gr/cm3
Thermal Conductivity (ASTM E1952):	33±0.01	W/m°K

Mechanical Properties

Tensile Strength (ASTM D638):	3±5	N/mm ²
Compressive Strength (ISO 844:2014):	190±5	N/mm ²
Poisson Coefficient (ASTM D638):	0.34±0.03	
Young Modulus (ASTM D638):	3500±100	N/mm ²

Recommended Working Values

T° Max. Continuous Operation:	482	°F
T° Max. Intermittent Operation:	662	°F

Material Type : Flexible material

Appearance / Formats



Applications

Callipers for industrial applications - Heavy loaded Winches and Cranes - Static brakes -

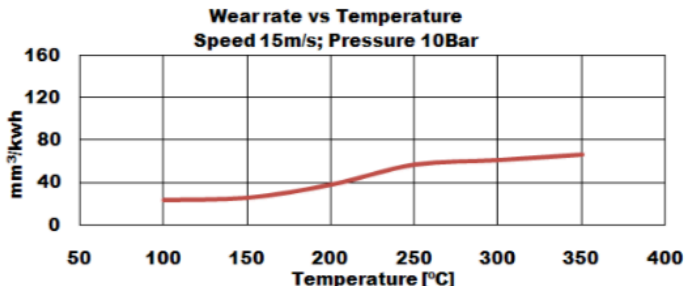
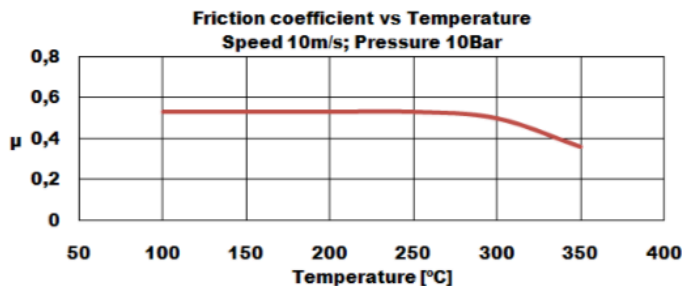
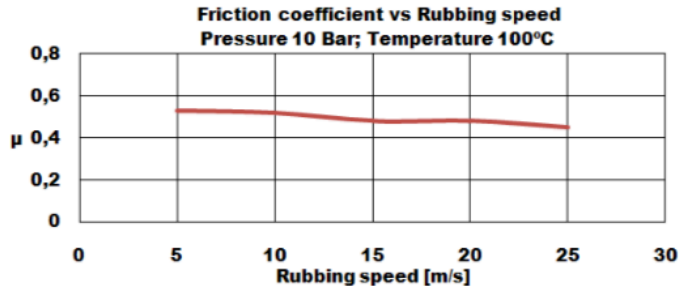
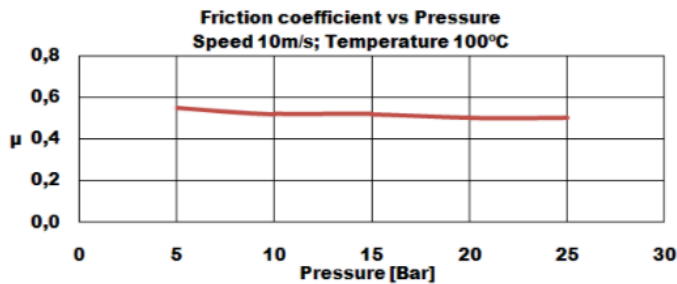
Price Level : \$ \$ \$ \$

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.