

TF2016

TF2016 is a rigid woven friction material with a medium friction coefficient. TF2016 is the heavy duty material for clutches. Developed in 1997, manufactured with draft yarn and aramid fibers. It is recommended for commercial vehicles, especially when thermal conditions are high.

Matarial Data		
Material Data		·
Friction Properties (according to graph		Material Type: Woven yarn
Static Friction Coefficient (15bar, from		
Static Friction Coefficient (15bar, 100	, , ,	Appearance / Formats
Dynamic Friction Coefficient (10bar, 1		
Wear Rate (mm ³ /Kwh): To Fading (10bar, 10m/s):	30 (at 302 °F) >662 °F	Bonded Rings Sheets
		·
Physical Properties		Applications
Hardness (DIN53505):	80±5 Shore-D	Heavy vehicle clutches - Trucks clutches - Vehicles clutches -
Specific Gravity (ASTM D792-91):	1.7±0.05 gr/cm3	Price Level : \$\$\$\$
Ignition Loss (ASTM D7348):	50±2 %	Reach (EC) 1907/2006 - RoHS 2011/65/EU : Compliance
Acetone Extraction (ASTM D494):	2±0.2 %	
Mechanical Properties		Others
Compressive Strength (ISO 844:2014):	120±5 N/mm ²	Recommended Mating Surface: Perlitic cast iron, hardness HB150-20
Burst Resistant (200 x 137 x 3,5) 392°F	: 12000±100 RPM	Recommended Adhesives: Thermosetting adhesive
Recommended Working Values		
T° Max. Continuous Operation:	482 °F	
T° Max. Intermittent Operation:	662 °F	
Friction coefficient vs Pressure		therefore results can vary in different application conditions Friction coefficient vs Rubbing speed
0,8 Speed 10m/s; 1	Temperature 100°C	0,8 Pressure 10 Bar; Temperature 100°C
0,6		0,6
μ 0,4		μ 0,4
0,2		0,2
0,0		0
0 5 10 Pre	15 20 25 30 ssure [Bar]	0 5 10 15 20 25 30 Rubbing speed [m/s]
Friction coefficient vs Temperature		Wear rate vs Temperature
0,8 Speed 10m	s; Pressure 10Bar	160 Speed 15m/s; Pressure 10Bar
0,6		£ ¹²⁰
μ 0,4		40 80 E 40
0,2		E 40
0		0

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.

350

300

400

50

100

150

200

Temperature [°C]

250

300

250

Temperature [°C]

200

50

100

150

400

350