



ID MATERIAL: R1  
RBLE: R. ANTICH  
REVISION: 5  
DATE: 23/05/2014

FRICTION MATERIAL:

# RP01

### > DESCRIPTION

RP01 is black rigid friction material which consists phenol resins as a bonding system, short fibres, friction modifiers and fillers. This offers a medium high static co efficiency and an excellent mechanical resistance, very successful for wind turbine components.

RP01 is fully cured and suitable for bonding and riveting.

### > MATERIAL TABLE

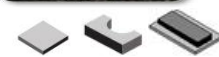
> FRICTION PROPERTIES	Value	Unit
Dynamic Friction Coefficient (@79N, 7m/s)	0.45±0.05	μ
Dynamic Friction Coefficient (@60N, 7m/s)	0.27±0.05	μ
Wear Rate (@79N, 7m/s)	85±10	mm <sup>3</sup> /kwh
T <sup>o</sup> Fading (@100N, 11.5m/s)	250±10	°C
> PHYSICAL PROPERTIES		
Hardness (DIN53505)	88±5	Shore-D
Specific Gravity (ASTM D792-91)	1.75±0.05	gr/cm <sup>3</sup>
Ignition Loss (ASTM D-2524)	30±2	%
Acetone Extraction ISO2859-1	0.15±0.2	%
Thermal Conductivity (ASTM E1952-01)	0.49±0.01	w/m <sup>o</sup> K
> MECHANICAL PROPERTIES		
Tensile Strength (ASTM D638-10)	19±5	N/mm <sup>2</sup>
Compressive Strength (UNE 53205)	110±5	N/mm <sup>2</sup>
Shear Modulus (ASTMD 2344-11)	2687±100	N/mm <sup>2</sup>
Poison Coefficient	0.24±0.03	
Young Modulus (ASTMD 638-10)	5506±100	N/mm <sup>2</sup>
> RECOMMENDED WORKING VALUES		
T <sup>o</sup> Max. Continuous Operation	250	°C
T <sup>o</sup> Max. Intermittent Operation	350	°C

**MATERIAL TYPE** Rigid mould friction material

**APPEARANCE**



**FORMATS**



**APPLICATIONS**

- Heavy duty static applications
- Yaw brakes
- Damper technologies
- Holding mechanical structures

**RECOMMENDED MATING SURFACE** Perlitic cast iron, hardness HB150-200

**OIL RESISTANCE** Yes

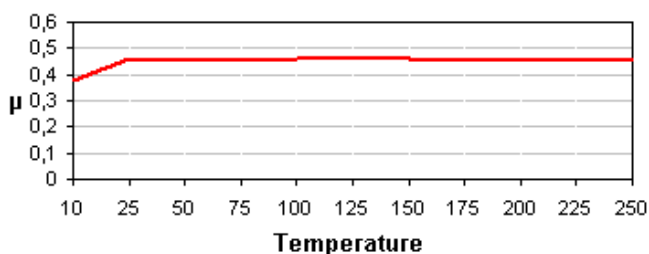
**RECOMMENDED ADHESIVE** Thermosetting adhesive

**PRICE LEVEL** € € €

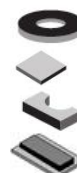
**REACH (EC)1907/2006** Compliance

**RoHS 2011/65/EU** Compliance

Friction coefficient (μ) vs Temperature (°C) @80psi 7m/s



### > LEGEND



Discs

Sheets

Finished Parts

Bonded