



ID Material: B2
Rble: R. Antich
Revision: 1
Last updated: 31/07/2021

SA18/04

This is a semi -rigid and semi-metallic moulded friction material. It is composed basically of resins and rubber as a link system with frictional modifier agents, mineral fibres and fine iron shavings to enhance its strength which help to establish the friction value by conducting heat from the operating surface. It is black with iron shavings. It has high and very stable friction coefficient with medium wear and excellent resistance to fading. It is suitable for both bonding and riveting.

Material data

Friction Properties (according graphics)

Static Friction Coefficient (15bar, from box):	0.40±0.05	μ
Static Friction Coefficient (15bar, 100°C):	0.50±0.05	μ
Dynamic Friction Coefficient:	see charts	
Wear Rate:	see charts	
T° Fading:	>400	°C

Physical properties

Hardness (DIN53505):	85±5	Shore-D
Specific Gravity (ASTM D792):	2.15±0.05	gr/cm3
Ignition Loss (ASTM D7348):	43±2	%
Acetone Extraction (ASTM D494):	3±0.2	%

Mechanical properties

Tensile Strength (ASTM D638):	13±5	N/mm²
Compressive Strength (ISO 844:2014):	75±5	N/mm²
Shear Modulus (ASTM D2344-00):	1740±100	N/mm²
Poisson Coefficient (ASTM D638):	0.18±0.03	
Young Modulus (ASTM D638):	4100±100	N/mm²

Recommended Working Values

T° Max. Continuous Operation:	350	°C
T° Max. Intermittent Operation:	450	°C



Material type : Rigid material

Appearance / Formats



Applications

Brake blocks - Callipers for industrial applications - Forging machinery - Gear discs for industrial devices - Heavy-duty industrial machinery - Mining industries - Miscellaneous industrial brakes / clutches - Punch-die press blocks - Ring segments - Torque limiter

Price Level : € € €

Reach (EC)1907/2023 - RoHS 2015/863/EU : Yes

Others

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



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.