

ID Material: 73
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MC140

MC140 is a rigid, semi-metallic, moulded material. It is a resin based material, and it uses rubber powder as a linkage, along with friction modifier agents, mineral fibers and fine copper shavings to enhance its strength. It has high temperature dissipation capacity from the operating surface, due to a very special phenolic resin designed to work and deal with high temperatures. MC140 has a high and very stable friction coefficient, and excellent resistance to fading, which makes it perfect for high performance applications such as racing brake pads for cars and bikes. MC140 is a fully cured material and is suitable for bonding & riveting.

Material data

Friction Properties (according graphics)

Static Friction Coefficient (15bar, from box):	0.60±0.05	μ
Static Friction Coefficient (15bar, 100°C):	0.65±0.05	μ
Dynamic Friction Coefficient:	see charts	
Wear Rate:	see charts	
T° Fading:	>550	°C

Physical properties

Hardness (DIN53505):	85±5	Shore-D
Specific Gravity (ASTM D792):	2.50±0.1	gr/cm3
Thermal Conductivity (ASTM E1952):	0.31±0.01	W/m²K

Mechanical properties

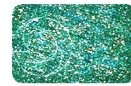
Tensile Strength (ASTM D638):	15±2	N/mm²
Compressive Strength (ISO 844:2014):	125±10	N/mm²
Shear Modulus (ASTM D2344-00):	2150±100	N/mm²
Poisson Coefficient (ASTM D638):	0.23±0.03	
Young Modulus (ASTM D638):	5300±100	N/mm²

Recommended Working Values

T° Max. Continuous Operation:	550	°C
T° Max. Intermittent Operation:	600	°C

Material type : Rigid material

Appearance / Formats



Bonded

Machined

Rings

Sheets

Applications

Brake pads - Callipers for industrial applications - Car / motorcycle competition clutches - Clutch buttons - Heavy duty static applications - Heavy loaded Winches and Cranes - Heavy vehicle clutches - Heavy-duty industrial machinery - Miscellaneous industrial brakes / clutches - Ring segments - Rotor Brake

Price Level : € € €

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

Others

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

