

## MTC09

## **Polyester Resin Composite**

(Fabric w/ MOLY)

## **SPECIFICATIONS**

Property	Imperial	Metric
Hardness	100 Rockwell M.	100 Rockwell M.
Density	0.045 Lbs/in³	1.25 g/cm³
Tensile Strength	9,500psi	65.5 N/mm <sup>2</sup>
Compression Strength Normal to Laminate	35,000psi	241 N/mm²
Compression Strength parallel to Laminate	13,500psi	93 N/mm²
Water Absorption	<0.1% of wall thk	
Maximum Operating Temp.	250°F	121°C
C o Friction	0.12-0.17	

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## **DESCRIPTION**

MTC09 is a polyester resin composite with hardness 100M specially compounded with MOLY. Fabric reinforced composite materials are engineered from liquid thermosetting resins impregnated in fabric and subsequently cured to form solid shapes. Various thermosetting resins are available for use as bushings and bearing as unsaturated polyester. Within each category there are numerous resins to choose from. Prudent selection of a resin depends upon its viscosity, desired thermal, chemical or mechanical properties. Unsaturated polyester resin is most commonly used. Vinyl ester resin has higher mechanical properties and better chemical and temperature resistance than unsaturated polyester resin. Phenolic resins are cured very differently and are used for high temperature, high pressure and flame resistant applications. Thermoset composite materials have highly cross linked molecular networks. As a result, they have much higher mechanical strength than thermoplastics.