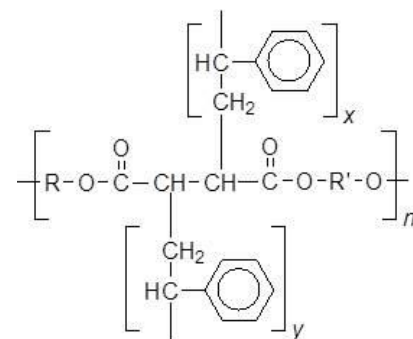


Polyester Resin Composite (MTC01)

SPECIFICATIONS

Property	Spec	Value
Hardness	Rockwell M	100
Co Friction	Internal	0.08-0.15
Density (g/cm ³)	DIN 53479	1.25-1.48
Tensile Strength-Longwise	DIN 53504	90 N/mm ²
Tensile Strength-Crosswise	DIN 53504	76 N/mm ²
Compression Strength \perp to Laminate		345 N/mm ²
Compression Strength = to Laminate		138 N/mm ²
Compressive Yield		85 MPa
Modulus Compression \perp		1900-2000 N/mm ²
Flexural Strength \perp to Laminate		138 N/mm ²
Flexural Strength = to Laminate		107 N/mm ²
Shear Strength		134 N/mm ²
Water Absorption		<0.1%
Coefficient of thermal expansion	20 to 100°C	
= to laminate	X 10 ⁻³	6 to 7
\perp to Laminate	X 10 ⁻³	12 to 13
Min Service Temp		-35°C -31°F
Max Service Temp		120°C 240°F
Color		Gray/Blue/Yellow



DESCRIPTION

MTC01 is a polyester resin composite with hardness 100 Rockwell M. 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.