

MATERIAL GRADE: TA 400



DESCRIPTION

TA 400 is a polyester resin composite with a hardness of 107 Rockwell M and comprised of a high temperature resin and fabric, rated for continuous service to 349 °F. It resists thermal softening under sustained compressive load, holding dimensional stability in environments where heat is a constant operating condition. Hard, machinable to precision tolerances, and negligible in water swell, TA400 is engineered for bearing and bushing applications in which steel and bronze become a maintenance liability.

SPECIFICATIONS

Property	Metric	U.S. Units
Specific Gravity	1.25 g/cm ³	– (dimensionless)
Swell In Water (Wall Thickness)	<0.1 %	<0.1 %
Rockwell Hardness	M Scale 107	M Scale 107
Tensile Strength*	58-60 MPa	≈ 8,410 – 8,700 psi
Compressive Strength* – Normal to Laminate	330-358 MPa	≈ 47,900 – 52,000 psi
Compressive Strength* – Parallel to Laminate	110-103 MPa	≈ 15,950 – 14,950 psi
Modulus of Elasticity	3,600 MPa	≈ 522,000 psi (≈ 0.52 × 10 ⁶ psi)
Coefficient of Friction	0.12 – 0.17	0.12 – 0.17
Max Operating Temperature	176 °C	≈ 349 °F
Color	Yellow	Yellow

*=Compressive & tensile strength test results are loads at failure, and may vary due to resin selection and solid lubricants incorporated within the resin.

