

TI International, Ltd.(TM)

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WASHAWAY CASTING COMPOUNDS

Typical Physical Properties

Product Number Form	TI2900 Powder	TI3800 Powder	TI4150 Powder	TI4750 Powder
Heat Resistance	290F	380F	415F	475F
Melting & Pouring Temperature	315-415 F	410-500 F	440-540 F	505-600F
Coefficient of Linear Expansion (IN/IN F)	-5 2.8 x 10	-5 2.6 x 10	-5 2.6 x 10	-5 2.4 x 10
Elevated Temp. Comp. Strength	2,875psi (@) 290F	2,950psi (@)380 F	2,900psi (@)415 F	1,580psi (@)475F
Comp. Strength - 78F	17,500psi	18,250psi	18,500psi	19,000psi
Softening Point	300-315 F	390-395 F	425-440 F	485-490F
Mold Temperature	150-210 F	150-210 F	150-210 F	150-210F

COMMON PROPERTIES OF ALL COMPOUNDS

Water solubility - Rate @ 135F	3 - 5 Min/Lb.
Density (Solid Cast)	142.5-143.5 Lbs/Cu. Ft.
Specific Volume (Solid Cast)	14.2-14.3 Cu. In/Lb.
Specific Heat	.32 to .71 BTU/Lb.
Latent Heat Of Fusion	34.9 BTU/Lb. (Approximately)
Heat Conductivity	Same As Water
Thermal Shock and Impact Resistance	Equal to Ceramic
Decomposition Temperature	900 F
Tooling Shrinkage Allowage	.008 in/in
Modulus of Elasticity	-5 3.1 - 3.6 x 11

The TI System is the basis for all your complex composite needs!!