



EL-323 TC COMPOSITE TOOLING COMPOUND

PRODUCT BULLETIN



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DESCRIPTION

EL-323 TC COMPOSITE TOOLING COMPOUND is a new and improved material for the construction of tools, jigs, models and other tooling requirements. The system saves a considerable amount of time and labor. EL-323 TC has a convenient mix ratio (1:1 by volume). Mix the blue resin and the yellow hardener into a light green compound. This insures thorough mixing and eliminates any possibilities of "hot spots" in the tool. The system when mixed is a very pliable elastic compound which can be applied to the tool surface without crumbling or cracking. EL-323 TC can also be applied at any thickness above 1/4" without excessive exotherm.

Tools constructed with Composite Tooling Compound maintain a very high degree of dimensional stability, are light in weight, and can be machined as well as drilled and tapped. All of these qualities allow the system to be used in a variety of tooling applications. EL-323 TC also offers the toolmaker a safer alternative to standard epoxy laminates since both resin and hardener are syntactic which eliminates splash hazards. Clean up is easy with soap and water. Composite Tooling Compound does not contain any corrosive or noxious aromatic amines. This system is both useful and non-toxic.

HANDLING CHARACTERISTICS @ 25°C/77°F

Mix Ratio (parts by volume).....	1R/1H
Density (mixed)	5.75 lbs/gal
Density (mixed)	0.022 lb/cu in
Specific Gravity (mixed)	0.689 gms/cc
Mixed Viscosity	Syntactic Dough
Work Life (400 gram mass)	2-2.5 hours
Demold Time	12-16 hours
Complete Cure	3 days
Peak Exotherm (1 lb mass)	105°F
Mixed Color	Green
Shelf Life Resin & Hardener (in original unopened container).....	1 year

PHYSICAL PROPERTIES

Test Sample: Sandwich construction with three layers of 10 oz glass fabric laminate on either side of 1/2" of EL-323 TC, and a single surface coat.

Ultimate Flexural Strength	13,050 psi
Flexural Modulus.....	1.027 x 10 ⁶ psi
Ultimate Compressive Strength.....	6,144 psi
Notched Izod Impact Strength.....	20.9 in-lbs

Cast Bar:

Hardness	60 Shore D
Coefficient of Thermal Expansion	3.2 x 10 ⁻⁶ in/in°F

Note: EL-323 TC Applications Guides are available for 'Duplicating Aids' / 'Jigs and Fixtures' / 'Open Molding'. Please contact our Technology Group or Customer Service to request these application guides.

EL-323 TC Tech/Revised 3/12/10
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