



TCC-630/115N LAMINATING SYSTEM

INTERMEDIATE/HIGH
TEMPERATURE, UNFILLED

PRODUCT BULLETIN



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DESCRIPTION

Epoxy Resin **TCC-630** with Epoxy Hardener **TCC-115N** is designed specifically for intermediate to high temperature tooling laminates. When cured this material demonstrates excellent thermal shock characteristics, low thermal degradation properties and high impact resistance at medium to higher temperatures. The handling properties are designed for use in laminating, vacuum bagging, and oven cure production processes.

HANDLING CHARACTERISTICS AND PHYSICAL PROPERTIES @25°C/77°F

Mix Ratio (parts by weight).....	Resin TCC-630/Hardener TCC-115N.....	100R/20H
Pot Life (100 gram mass).....		50 minutes
Linear Shrinkage		0.0015 in/in
Mixed Specific Gravity.....		1.09
Viscosity:		
.....	Resin TCC-630	1,600 cps
.....	Hardener TCC-115N.....	100 cps
.....	Mixed Viscosity	630 cps
Color:		
.....	Resin TCC-630	Clear
.....	Hardener TCC-115N.....	Amber
.....	Mixed Color	Amber
Heat Deflection Temperature @ 66 psi.....		103°C/217°F
Coefficient of Linear Thermal Expansion		4.9 x 10 ⁻⁵ in/in/°F
Hardness		88 Shore D
Compressive Strength.....		37,000 psi
Tensile Strength		11,850 psi
Flexural Strength.....		13,000 psi
Machineability.....		Excellent
Cure Time.....		12 - 24 hours
Shelf Life (in original unopened containers).....	TCC-630/TCC-115N	2 years

POST CURE SCHEDULE

This epoxy system will cure to a demoldable state in 12 to 24 hours if the tool is kept at an ambient temperature (70°F - 75°F). A post cure is required if the tool is to be used at elevated temperatures

Place tool in oven at room temperature and then set oven to 150°F. Cure for 2 hours at 150°F (66°C). Raise oven temperature and continue cure for 2 hours at 200°F (94°C). Raise oven temperature and continue cure for 2 more hours at 250°F (121°C). Turn oven off and let cool slowly in oven until tool reaches room temperature.

SANITARY PRECAUTIONS

Do not take internally. Avoid prolonged breathing of vapors. Work in a well-ventilated area. Avoid skin contact. Protective gloves should be worn. If contact occurs: wash skin with soap and water. Avoid eye contact. If contact occurs: rinse well with water for 15 minutes, contact physician.

TCC-630/115N Tech/Revised 9/13/11
Supercedes 10/12/10

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