



**TCC-601/116A
SURFACE CASTING
SYSTEM
HIGH TEMPERATURE
ALUMINUM FILLED**

PRODUCT BULLETIN



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DESCRIPTION

Epoxy Resin **TCC-601** with Epoxy Hardener **TCC-116A** is designed specifically for high temperature surfaces casting applications. This high temperature system demonstrates excellent thermal shock characteristics, low thermal degradation properties, and high impact resistance at elevated temperatures.

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

Mix Ratio (parts by weight).....	Resin TCC-601/Hardener TCC-116A	100R/8H
Pot Life (500 gram mass).....		2 hours
Peak Exotherm.....		1" @ 140°F
Maximum Thickness of Cast.....		1 inch
Linear Shrinkage		0.0015 in/in
Mixed Specific Gravity.....		1.46
Viscosity		
.....	Resin TCC-601	65,000 cps
.....	Hardener TCC-116A	15 cps
.....	Mixed Viscosity	6,000 cps
Color		
.....	Resin TCC-601	Aluminum
.....	Hardener TCC-116A	Clear
.....	Cured Color.....	Aluminum
Peak Operating Temperature.....		350°F
Coefficient of Linear Thermal Expansion		4.9 x 10 ⁻⁵ in/in/°F
Hardness		85 Shore D
Compressive Strength.....		37,000 psi
Tensile Strength		9,850 psi
Flexural Strength.....		13,000 psi
Machineability.....		Excellent
Cure Time.....		12 - 24 hours
Shelf Life (in original unopened containers).....	TCC-601/TCC-116A	2 years

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POST CURE SCHEDULE

This epoxy system will cure to a demoldable state in 12 to 48 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.

These curing times may have to be extended for large tools. For applications over 300°F (148°C), or for large tools, consult your CASS Polymers Company Representative.

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, consult physician.

STORAGE

Store at room temperature. Before use, mix resin well with mechanical device.

TCC-601 Tech/Revised 5/24/10
Supercedes 5/18/06