



# TCC-410 SURFACE/MASS CASTING SYSTEM

IMPACT RESISTANT

PRODUCT BULLETIN



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## DESCRIPTION

Epoxy Resin **TCC-410** is an aluminum filled system designed for high-impact resistance. This system can be surface cast to metal or other low-cost cores or it may be mass casted. Depending on thickness of cast, a choice of hardeners is provided to control exothermic heat and shrinkage. Applications for this system include casting surfaces on prototype stamping dies or mass casting applications where high-impact resistance is desired.

## HANDLING CHARACTERISTICS @ 25°C/77°F AND HARDENER SELECTION

Thickness of Cast	<u>Surface Cast ½" - 1"</u>	<u>Mass Cast 1" - 4"</u>	<u>Mass Cast 4" - 10"</u>
Hardener Selection	<b>TCC-104</b>	<b>TCC-104-5</b>	<b>TCC-105</b>
Mix Ratio (parts by weight):			
.....Resin TCC 410.....	100 parts.....	100 parts.....	100 parts
.....Hardener .....	10 parts.....	10 parts .....	10 parts
Pot Life (500 gram mass).....	60 minutes .....	100 minutes .....	2 - 3 hours
.....Peak Exotherm.....	200°F .....	N/A .....	N/A
Peak Operating Temperature.....	180°F .....	210°F .....	240°F
Cure Time.....	8 - 12 hours .....	18 - 36 hours.....	48 - 72 hours

## PHYSICAL PROPERTIES (TCC-104 Hardener) @ 25°C/77°F

Mixed Specific Gravity.....	1.65
Mixed Viscosity .....	5,000 cps
Cured Color .....	Aluminum
Hardness .....	84 Shore D
Density .....	102 lbs/ft <sup>3</sup>
Notched Izod Impact Strength.....	85 ft lbs/in
Tensile Strength .....	7,000 psi
Shelf Life (in original unopened containers).....	TCC-410/TCC-104, TCC-104-5, or TCC-105..... 2 years

## 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.

## STORAGE

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

TCC-410 Tech/Revised 5/20/10  
Supercedes 5/17/06

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