

TECHNICAL DATA SHEET

TCC-410

SURFACE/MASS CASTING SYSTEM IMPACT RESISTANT

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.

APPLICATIONS

- Casting surfaces on prototype stamping dies
- Mass casting applications

PHYSICAL PROPERTIES

Thickness of Cast >	Surface Cast ½" - 1"	Mass Cast 1" - 4"	Mass Cast 4" - 10"
Hardener Selection	TCC-104	TCC-104-5	TCC-105
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 (93°C)		
Peak Operating Temperature	180°F (82°C)	210°F (99°C)	240°F (116°C)
Cure Time	8 - 12 hours	18- 36 hours	48 - 72 hours

TYPICAL PHYSICAL PROPERTIES with TCC-104 H @ 77°F (25°C) – Cured 7 days @ R.T.	
Specific Gravity (g/cc)	1.65
Mixed Viscosity - (cps & mPa.s)_	6,000
Cured Color - Visual	Aluminum - Gray
Hardness - (Shore D)	84
Linear Shrinkage – (in/in)	0.0015
Notched Izod Impact Strength - (ft lbs/in)	8.5
Tensile Strength - psi (MPa)	7,000 (48)
Shelf Life (in original unopened containers)	TCC-401/TCC-104, TCC-104-5, or TCC-105 2 years

HANDLING PRECAUTIONS

Normal health and safety precautions should be observed when handling these products:

- Ensure good ventilation.
- Wear gloves, glasses and protective clothes.

For further information, please consult the Safety Data Sheets.

STORAGE CONDITIONS

- This product has a shelf life of 24 months for the resin and hardener as indicated by the expiration date on the container when stored in original unopened containers.

PACKAGING

Packaging information on request, please contact your local sales representative or find your local contact on www.sikaadvancedresins.us

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