

BUILDING TRUST

TECHNICAL DATA SHEET

TCC-626 with TCC-116ANF or TCC-116A HARDENERS

SURFACE CASTING SYSTEM HIGH TEMPERATURE

DESCRIPTION

Epoxy Resin TCC-626 with Hardeners TCC-116ANF (faster cure/pot life) and TCC-116A (slower cure/potlife) was designed specifically for high temperature surface casting applications. When cured, this material has excellent thermal shock characteristics, low thermal degradation properties and high impact resistance at elevated temperatures.

APPLICATIONS

- Casting surfaces on prototype stamping dies
- Mold surfacing repair
- Various surface casting applications



PHYSICAL PROPERTIES

TYPICAL HANDLING PROPERTIES @ 77°F (25°C)			
Hardener Selection	TCC-116ANF	TCC-116A	
Mix Ratio (parts by weight):			
Resin TCC-626	100 parts	100 parts	
Hardener	12 parts	12 parts	
Color	Black	Black	
Mixed Viscosity - (cps & mPa.s)	2,400	3,000	
Pot Life (500 gram mass) - (Minutes)	30	120	
Cure Time (Hrs)	12 - 24	12-24	

TYPICAL PHYSICAL PROPERTIES - (WITH 250°F (121°C) POSTCURE*) - TESTED @ 77°F (25°C)			
Hardener Selection	TCC-116ANF	TCC-116A	
Specific Gravity (g/cc)	1.49	1.43	
Flexural Strength psi (MPa)	10,113 (70)	13,000 (90)	
Tensile Strength psi (MPa)	7,401 (51)	9,000 (62)	
Compressive Strength psi (MPa)		37,000 (255)	
HDT – Heat Deflection Temp. @ 66 psi °F (°C)	203 (95)	210 (103)	
Hardness (Shore D)	85	85	

NOTE - Stir TCC-626 resin well before use.

POST CURE SCHEDULE*

This epoxy system will cure to a demoldable state in 12 to 48 hours if the tool is kept in an ambient temperature 70°F-75°F (21°C-24°C). 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 (66°C). 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.

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 12 months for the resin as indicated by the expiration date on the container when stored in original unopened containers between 47°F – 77°F (8°C – 25°C). The product shelf life for the hardener is 24 months between 60°F (15°C) and 77°F (25°C). Any opened can must be tightly closed.

PACKAGING

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

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