

TECHNICAL DATA SHEET

TCC-205

EPOXY LAMINATING SYSTEM AND BOARD ADHESIVE ROOM TEMPERATURE, TWO HARDENER CHOICES – TCC-102 & TCC-104

DESCRIPTION

Epoxy Resin TCC-205 with either Epoxy Hardener TCC-102 or TCC-104 is a rigid epoxy system having low viscosity with two hardeners for fast and medium pot life. This system is easy to use and has no objectionable fumes. Applications include as an adhesive system for the Sika line of machinable polyurethane modeling and tooling boards, and as an adhesive for adhering plastic to wood. This system is also well suited as an unfilled room temperature laminating resin, which provides excellent wet-out when using fiberglass and graphite cloth.

- High mechanical properties
- Variable use hardeners
- Excellent wet-out
- Excellent adhesive properties

APPLICATIONS

- Prototypes, patterns and core boxes
- Master models, Keller Models
- Production parts
- Trim, holding, and checking fixtures
- Duplication splashes
- Router and drill fixtures

PHYSICAL PROPERTIES

Property	Test Method	TCC-205 Resin	TCC-102 Hardener	TCC-104 Hardener
Composition		Epoxy	Amine	Amine
Mix ratio by weight		100	25	25
Cured color (mixed)			Clear amber	Clear amber
Specific gravity (g/cc)			1.09	1.10
Mixed viscosity at 77°F (25°C) (Cps & mPas)	ASTM D2393		700	800
Pot life at 77°F (25°C) (100 g) (Minutes) (454 g) (Minutes)	ASTM D2471		15 – 20 8 - 10	30 – 35 12 - 14
Rigid cure time (hours)			2 - 4	4 - 8

Neat - Mechanical and Thermal Properties ⁽¹⁾

Property	Test Method	TCC-102 Hardener	TCC-104 Hardener
Hardness (Shore D)	ASTM D-2240	82 - 85	82 - 85
Flexural strength psi (Mpa)	ASTM D790	18,000 (124)	18,000 (124)
Tensile Strength psi (Mpa)	ASTM D638	9,500 (66)	9,500 (66)
Tensile elongation (%)	ASTM D638	2.0	2.0
Compressive strength psi (Mpa)	ASTM D695	30,000 (207)	30,000 (207)
Peak operating temperature °F (°C)		180 (82)	180 (82)
Cured color		Clear amber	Clear amber
Rigid cure time (hours)		2 - 4	4 - 8

⁽¹⁾ The above properties were obtained under laboratory conditions using standardized specimens. Cured 7 days at 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 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

LEGAL NOTICE

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