

TECHNICAL DATA SHEET

TRICAST 10 EPOXY RESIN SYSTEM PART A & PART B

PRODUCT IDENTIFIER

Product Name:	TriCast 10 Epoxy Resin System Part A & Part B 1202480 Rev.1
Revision Date:	03-OCT-2025

Epoxy casting resin with high transparency – quick setting thin layer or small object

Applications

- In art and decoration applications to make transparent coatings or sealing surfaces in thin layers from 1 to 3mm (wood, paper, ceramic etc...)
- In art and decoration applications to make small objects up to 10 mm thick in silicone molds such jewelry, giftware, key chains or souvenirs

Main Properties

- High transparency
- Easy mixing ratio 2:1
- Self-degassing behaviour
- Quick setting in thin layers/section
- Good UV resistance

DESCRIPTION

PROPERTIES	TEST METHOD
Basis	Two component epoxy system
Component A	TriCast 10 Epoxy Resin System Part A, epoxy resin, unfilled, bluish-transparent
Component B	TriCast 10 Epoxy Resin System Part B, amine, unfilled, transparent

PHYSICAL PROPERTIES

		RESIN (A)	HARDNER (B)
Viscosity, 25 °C	mPa.s	~ 1900	~ 650
Density, 23 °C	g/cm3	~ 1.12	~ 1.00

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Mixing ratio	in parts by weight	100	50
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		Mixture	
Colour		transparent	
Viscosity, 25 °C	mPa.s	~ 1100	
Reactivity on 150 g, 25 °C	min	~ 40	
Tack-free time in thin layer 1-3mm, 23°C	hours	~ 6 - 7	

MECHANICAL & THERMAL PROPERTIES

approx. values on standard-sized specimen / after curing 7 days at room temperature

PROPERTIES	TEST METHOD	UNIT	TYPICAL VALUES
Shore hardness	ISO 868	Shore D1	D 84
Elongation at maximum strength	ISO 527	%	5.3
Flexural modulus	ISO 178	MPa	2800
Glass transition temperature (TG)	ISO 11359-2	°C	56
Glass transition temperature (TG) after 24h@23°C + 16h@80°C	ISO 11359-2	°C	73

SPECIFIC PROPERTIES

approx.. values at 23°C room temperature

PROPERTIES	UNIT	TYPICAL VALUES
Maximum casting thickness on plate 350 x 300 mm	mm	5
Maximum casting thickness small casted parts (<100g)	mm	10
Demolding time small casted parts (<100g) in 10mm thickness	Hours	< 16
Demolding time small casted parts (<100g) in 5mm thickness	Hours	< 20

Processing Data

- Room temperature and thickness with volume casted are the most important parameters to be successful in **TriCast 10 Epoxy Resin System Part A & Part B** casting. There is a link in between room temperature (RT), thickness of cast resin and curing speed. Excessive thickness or room temperature may induce high exothermic reaction leading to yellowing, cracks or uneven surface once cured.

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- In thin layers when coating or sealing between 1 to 3 mm, a warm room 23–25°C is advised to speed up curing and get best properties.
- In small objects casting from self-releasing silicone mold, it is recommended not to exceed 10mm thickness to avoid exothermic reaction affecting cured aspect. Alternatively and when possible lower resin and room temperatures to 18–20°C or switch to slower system **TriCast 10 Epoxy Resin System**.
- Good adhesion on many substrates, the use of a liquid or pasty wax release would prevent bonding on models and supports. Please consult product data sheets of Sika Release Agents or contact local technical assistance.
- Mixing should be done by hand or with an electric mixer. Be careful not to incorporate too much air while mixing. Emulsion must be avoided.
- After a primary mixing in a bucket pour the product in a second bucket and finish the mixing. Scrap well the walls of the mixing container. Prior to casting the mixing can be left for self-degassing for maximum 10 minutes. Alternatively, the mixing can be evacuated in a vacuum chamber.
- According to pot life and viscosity the casting frame must be perfectly tight. Brown PE packing tape is self-releasing from the resin and could be used in corners of the box and anywhere resin should not bond on support.
- When casting 3mm and above it will flow and self-level. For thinner and large surface it is possible to spread it out with a flexible spatula or a brush.
- A thin sanding and polishing are almost always needed to get shiny and flat surface. Use appropriate tools in order to avoid heat on the resin when polishing. Water sandpaper is advised.
- Polishing paste on a buffer is giving the best finishing. Do not heat up too much the casting layer when polishing in order to avoid marks.

STORAGE CONDITIONS

Shelf life	• Resin (A)	12 months
	• Hardner (B)	12 months
Storage temperature	• Resin (A)	15 – 25 °C
	• Hardner (B)	15 – 25 °C
Crystallization	<ul style="list-style-type: none">• After prolonged storage at low temperature, crystallization of A (RESIN) component may occur.• This is easily removed by warming up for a sufficient time to a maximum of 70 °C.	

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	<ul style="list-style-type: none">• Allow to cool to requested processing temperature before use.
Opened packagings	<ul style="list-style-type: none">• Containers must be closed tightly immediately after use to prevent moisture and dust ingress.• The residual material needs to be used up as soon as possible.

Basis of Product Data

All technical data stated in this document are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

Health & Safety Information

For information and advice regarding transportation, handling, storage and disposal of chemical products, users shall refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety-related data.

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Tricel Composites (GB) Limited

Unit A, Foxway,
Off Atkinson Street,
Leeds, West Yorkshire,
LS10 1PS.

Tel: +44 (0)113 270 3133

Email: sales@tricelcomposites.co.uk

Tricel Composites (NI) Limited

Unit 4, Milltown Ind. Estate, Greenan
Road. Warrenpoint, Newry
Co. Down,
BT34 3FN.

Tel: +44 (0)284 175 3738

Email: sales@tricelcomposites.co.uk