

TRI-POXY 200

Clear Solvent free epoxy for casting.

Description

TRI-POXY 200 is a two component, solvent free and clear epoxy For casting.

TRI-POXY200 has been formulated for maximum compatibility with a wide range of substrates and mould materials and is particularly suited for casting into wood where it can be used to create stunning thick, clear resin in fills in furniture.



Typical uses

TRI-POXY 200 can be used for just about any application that requires a water-clear bubble free and tough resin casting like :-

- Furniture: River Tables, Knot Holes, Crack Filling.
- Clear Castings: Such as Sculptures, Figurines, Paper weights.
- Encapsulations: Dry Flowers, Stones.
- Wood Turning: Bowls, Spheres & Vases.

Advantages

- Give smooth surface.
- Hygienic surface.
- Up to 25mm (per layer) into wood as casting material .
- Shiny and beautiful surface.
- Can be colored.
- No odor.
- Clear and transparent.
- Doesn't require any specialist equipment

Technical properties @25c

Appearance	Clear and transparent liquid
Viscosity @ 25 ° C	200 -300mPa.s
Solid content	98 ± 2
Specific gravity	1.10 ±0.05 g/cm3
Mixing ratio (A: B)	3.3 A: 1 B
Pot life	40 - 60 minutes @25 °C
Hardness 25°C D/1580 - 85	Comply

Directions for use

Ambient Temperature

Like most epoxy resins, the way that **Tri-Poxy 200** will cure is very dependent upon the ambient temperature.

For best results, an ambient temperature of between 20°C and 25 °C is recommended.

Surfaces Preparation

In much the same way that **Tri-Poxy 200** can be adversely affected Whilst curing by moisture in the air, it will also be affected by any moisture in the surface into which it is poured. Whatever surface you are pouring onto, it is important to ensure that the surface is as dry and stable as possible.

This is particularly relevant when working with natural materials like wood and cork or concrete where moisture levels within the substrate can be high.

When working with wood that is either freshly sawn or Reclaimed/salvaged from a damp environment it will be necessary to dry the wood thoroughly before use.

Failure to ensure that wood is properly dried and stabilized can result in a surface reaction with the resin as well as 'bowing' or distortion if the wood starts to dry after the resin layer has been cast.

Sealing Coat - Required for All Porous Surfaces

When working with porous substrates such as wood, chipboard, concrete or ceramics it is highly recommended to first seal the substrate with a thin application of **Tri-Poxy 200**.

The sealing coat must be allowed to fully cure before proceeding. The sealing coat can be applied with a disposable brush or spry.

Embedments

Just as with the surface preparation, it is important to ensure that any materials that are going to be embedded within the resin, such as pennies, crushed glass, bottle tops, corks, leaves etc. are thoroughly dry.

Any embedments may also require being glued/Fastened down to stop them floating in the resin once it is poured.

Mixing

The entire contents of the part B can should be poured into the part A container and the two materials mixed thoroughly for about 2 to 3 minute still you get a homogeneous liquid.

Tri-Poxy 200 is a two-part epoxy resin system. As soon as the two parts are mixed together they will begin to cure.

It is essential to mix the resin and hardener exactly at the correct mix ratio. Failure to do so will result in a poor or only partial cure of the resin.

The Main Pour

Ensure your work area is as free of airborne dust as possible.

Ensure the ambient temperature is between 20°C- 25°C.

Follow the instructions for measuring and mixing the resin making sure that your mix ratio is very accurate and that your mixing is very thorough.

Once the sealing/base coat of the resin has cured it is important to Continue straight away with the stage of the main pour.

Trapped Air

Tri-Poxy 200 will fully release any trapped air to leave a beautiful bubble-free finish.

After pouring, it usually takes the resin around 10-15 minutes to expel trapped air.

Factors such as ambient temperature, mixing action, pouring thickness and the substrate you're pouring onto can all influence the appearance of trapped air (bubbles) within the resin.

After around 10 mins, if you find that you can still see trapped air bubbles with this resin then lightly passing over the surface of the resin with a heat gun or blow torch on a low setting will help to dispel any bubbles.

Curing Time

The time it takes for the resin to cure fully will depend very much on the ambient temperature at 20°C you should allow at least 72hrs before de-moulding (if casting into a mould) or attempting to do any work on the resin (such as sanding or polishing).

Tri-Poxy 200 will take around 7 days to reach full hardness.

Polishing and Finishing Shaping and Polishing

To flat and finish **Tri-Poxy 200**, follow standard flattening and polishing techniques of working up through the grits of abrasive paper until you reach around P1000 grit before changing to a polishing compound and power polisher for the final gloss finish.

This process can also be followed to restore surface scratches and dulling from continual use.

Package

- **TRI-POXY 200** is supplied in 1 Kg or 3 Kg pack.

Storage conditions

- Store the material in a cool, dry and covered place.
- Temperature should not exceed 35 °C.
- Do not expose the pails to direct sunlight and keep away from all sources of heat.

Shelf life

- 24 months in good storage conditions in original packing. .

Cleaning

Clean all tools and equipment immediately after use with **Tri-Sol 10**.

Sustainability and environmental accountability

- TRI-CHEM's Environmental sustainability is the accountability to conserve natural resources and protect global ecosystems to support health and well-being for this a more positive approach is that accountability guides the actions of power-holders towards more socially and environmentally sustainable results.

Technical support

- For any technical support, please contact TRI-CHEM technical office or representatives.

Health and safety responsibility

- Workplace health and safety is all about sensibly managing risks to protect TRI-CHEM's workers and business.
- ISO 45001 is a systematic health and safety management is characterized by strong leadership involving managers, workers, suppliers, contractors and customers and also health and safety management is an essential part of the movement towards sustainable development.
- Spillages should be washed down immediately.
- PPE in accordance with the health and safety rules should be used during the materials application.
- For irritant effects of the non-cured material, avoid contact with skin and eyes during storage and application.

Institutional Excellence and quality performance

- Institutional excellence in TRI-CHEM refers to achieving high levels of performance, quality and effectiveness in all aspects of TRI-CHEM company's work, it involves a systematic and continuous effort to improve an organization's performance by applying best practices, innovative approaches and evidence-based strategies, institutional excellence spans various areas, such as training , research, innovation, community engagement, governance, management and sustainability, and involves setting high standards, measuring performance against these standards and continuously improving performance to meet or exceed these standards, excellence in TRI-CHEM also includes a culture of continuous improvement and learning, where everyone in the organization is committed to achieving the organization's goals, working together to find solutions to challenges and opportunities, and requires a collaborative approach that includes all stakeholders.
- All products originating from TRI-CHEM facility are manufactured under a quality management system independently certified to conform the requirements of the quality standards (ISO 9001:2015)

Disclaimer

- TRI-CHEM may modify it without prior notice and technical characteristics are listed for guidance only.
- Any specification, recommendation or information mentioned in this product data sheet is (to TRI-CHEM's best knowledge) true and reliable.
- While TRI-CHEM guarantees its products against defective materials, the use and application of these products are made without guarantee since the conditions of their application are beyond its control.
- TRI-CHEM is recommended to verify with TRI-CHEM that the product is suitable for the intended use, and that this data sheet version is the latest one.
- However, because TRI-CHEM has no influence on the application method of these products and the care taken, the company cannot accept any liability arising from the use of its products. TRI-CHEM's warranty is therefore limited to the quality of the materials supplied which are guaranteed against defective materials.

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