Shallow-Cast Epoxy

Clear casting resin for top-coating, casting & encapsulation up to 15 mm thick

Description

Shallow-Cast Epoxy is a two-component, 100% solids, epoxy casting product that is specifically designed for casting, encapsulation, and top-coating. It has medium reactivity, making it ideal for casting and encapsulation of materials up to 15 mm thick. Shallow-Cast cures to a crystal clear solid with minimal shrinkage.

Features

- Controlled reactivity
- Crystal clear
- Low viscosity for good penetration & levelling
- Excellent colour stability and air release
- Impact resistant
- Can be used with coloured and clear systems
- Good adhesion to many substrates

Application

1. Ensure that your mixing container and mixer are perfectly clean. A mixing container that is 50% bigger than the desired pour volume is recommended to avoid spillage

2. Apply DTECC's Liquid release agent to the mould for an easy release after curing.

3. Measure component A and B precisely. Variations to mix ratio may cause incomplete curing. The mix ratio is 2:1 (A:B) by weight or 1,8:1 (A:B) by volume. It is not recommended to mix more than 5 kg at one time.

4. Thoroughly mix the liquid components for at least 5 minutes. Add any colorants at this point, Scrape the sides of the mixing container every few minutes. The mixture will turn milky white at the start. It is important to continue mixing until all cloudiness disappears.

5. Allow the mixed product to stand for 5 - 10 minutes. Use a heat gun or butane torch to pop any bubbles that rise to the surface. (Take Caution On This Step As Your Working Time Is 20 – 30 min)

6. Pour the mixed product into the mould. Do not scrape the sides of the mixing container as this may result in uncured spots in your final casting

7. Use DTECC's Finishing Spray, heat gun or butane torch to pop any bubbles that rise to the surface directly after casting.

8. Cover the product so that dust and other debris don't settle on the epoxy surface as it is curing.

9. The product can be demoulded after 24 - 30 hours when cured at ambient conditions around 25 °C. It is important not to machine the epoxy product at this point as full cure will not have been achieved. Machining can only be done after 4 days when cured at 25 °C.

* Vacuum degassing mixed material using a vacuum pump and chamber to remove entrapped air is recommended … Make sure to warm the material up (40°C) before doing so.

Specifications

Property	**Unit**	**Component A**	**Component B**
Solids content	%	100	100
Mix ratio by weight		2	1
Mix ratio by volume		1.8	1
Viscosity @ 25 °C	mPa.s	1700	200
Density	kg/litre	1.18	0.98
Limiting properties			
Maximum application temperature	°C	28	
Minimum application temperature	°C	13	
Maximum pour thickness	mm	15	
Minimum pour thickness	mm	5	

Mixed Properties		
Pot life (60 g) @ 25 °C	Minutes	20-30
Demould / cure time @ 25 °C	hours	24 - 30
Full cure time @25 °C	Days	4
Hardness	Shore D	78-82
Tensile strength	MPa	65
Elongation at break	%	8
Compressive strength	MPa	300

Packaging		A	B
1 Kg Kit		0.67 g	0.33 g

6 Kg Kit		4 Kg	2 Kg
15 Kg Kit		10 Kg	5 Kg
15 Kg +	**Contact**	**info@dtecc.co.za**	

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