

Deep-Cast Epoxy

Exotherm-Controlled, Clear Casting Resin For Large Castings & Encapsulation.

Description

Deep-Cast Epoxy is a two-component, 100% solids, epoxy casting product that is specifically designed for large castings and encapsulation. Its lower reactivity allows for casting up to 100mm thick where it cures to a crystal clear solid with minimal shrinkage.

Features

- Low Exotherm For Thick Pours
- 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 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 3:1 (A:B) by weight or 2,5:1 (A:B) by volume. It is **not recommended** to **mix more than 15 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 15 minutes. Use a heat gun or butane torch to pop any bubbles that rise to the surface.

6. Pour the mixed product into the mould. Do not scrape the sides of the mixing container as 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 after 15 – 20min of 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 4 days 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 7 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		3	1
Mix ratio by volume		2.5	1
Viscosity @ 25 °C	mPa.s	1200	60
Density	kg/litre	1.15	0.95
Limiting properties			
Maximum application temperature	°C	28	
Minimum application temperature	°C	18	
Maximum pour thickness	mm	100	
Minimum pour thickness	mm	8	

Mixed Properties		
Pot life (60 g) @ 25 °C	Hours	10+
Demould cure time @ 25 °C	Days	4
Full cure time @25 °C	Days	7
Hardness	Shore D	67
Tensile strength	MPa	65
Elongation at break	%	8
Compressive strength	MPa	300

Packaging		A	B
1 Kg Kit		0.75 g	0.25 g
6 Kg Kit		4.50 Kg	1.50 Kg
15 Kg Kit		11.25 Kg	3.75 Kg
15 Kg+	Contact	info@dtecc.co.za	

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