TECHNICAL DATA SHEET

Epoxy Coating: *EPOXY CASTING SYSTEM* Last update: November 2019

CHEM-THICK

100% Solids, Crystal Clear Casting Epoxy

PRODUCT DESCRIPTION

CHEM-THICK is an odourless, two-component, VOC-free, casting system with 100% solids. The product can be poured at any thickness level (approximately 3 inches of single coating for regular applications) and still maintain a crystal-clear look. This product can also be applied to chemical applications to prevent them from shrinking. It has excellent air release properties with great color retention abilities. Its excellent impact resistance capabilities is evidence of its superior mechanical properties. For best results, leave the product at room temperature for a week.

USES

This product has all the necessary properties required for casting applications on different substrates like concrete, metal, woods, granite, rock, to name a few. Users are encouraged to carry out all the necessary adhesion tests before commencing with the product.

ADVANTAGES

- Excellent UV resistance properties
- Environment-friendly (VOC-free, solvent-free and 100% solids)
- It is odourless
- Easy to apply, with a great working time and long pot life
- Great for casting and applications with lesser encapsulations

APPLICATION DATA

Mix Ratio	**2 A : 1 B**	
Color	Clear	
Shelf Life	One year, in original unopened factory pails under normal storage conditions	
Applic. temp.	20°C	
Cure Time		
Gel Time	76 hours	20°C and 55% rel. hum
3 inch (Tack Free)	96 hours	20°C and 55% rel. hum
15 mils (Tack Free)	88 hours	20°C and 55% rel. hum
Solids Content	100%	

CURING TIME

The biggest determinants of the curing time are thickness and shape of volume poured. Curing time can also be affected by quantity, shape sought and ambient temperature. For best results, apply the product in a stable room temperature of approximately 20 degrees. The curing quality can also be affected by overtly low temperature, while an exothermic reaction is a possible consequence of a high ambient temperature. Product heating is a great way to avoid bubbling, but it could inadvertently cause an exothermic reaction. The product thickness should not exceed 3 inches when applied in large areas. However, smaller applications, areas and shapes can make do with a thicker quantity. Adequate testing should be conducted before commencing with this product.

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APPLICATION

The product should only be applied with an average substrate and air temperature of 20ºC. Keep your working area dust-free. Design a screen to protect the surface once the work is completed to prevent dust, particles and other objects from landing on the epoxy before curing as this could have a negative impact on the results. Brush or roll the CHEM 100 or CHEM-NATURAL products in thin layers to seal off the porous surfaces. Once you notice any tackiness on the seal coat, commence the pouring process. Seal off the substrate to prevent bubbles from coming off the surface pores. Once sealed, pour the product on the surface. The product can also be heated in low heat to prevent bubbles entrapment. The room temperature should not be below 18ºC because it can inhibit proper curing of the product.

MIXING

Mix two parts A and one B in a separate container at a lower speed. Don't forget to follow the appropriate ratio to ensure proper curing of the product. Endeavour to use a clean container one without external particles for the mixing. Dedicate 3 minutes for vigorous mixing of the product. Rushing through the mixing process might trap air into the product so avoid that. Larger quantities require a slower mixing speed. Mix the product until it achieves an even look. The product should not appear cloudy or milky when the mixing is over. Avoid mixing anything above 3 gallons at the same time. Do not mix more than the quantity you want to use. Avoid letting unmixed material droplets on your surface because it might affect the final look and the curing by reacting negatively to their counterparts.

CLEAN UP

You don't have to worry about restrictions when disposing your cured products. You dispose your excess liquid materials in the normal way after curing. Make sure you follow the provincial and municipal regulations when disposing your product. Uncured materials can be removed with the right solvent. For instructions and warnings on the usage of this product, follow manufacturer's instructions.

LIMITATIONS

Thickness and volume are the biggest determinants of the curing time. Curing times may vary significantly according to the shape and quantity of volume poured. Pouring an overtly large volume could lead to an exothermic reaction. Possible effects of an exothermic reaction includes the appearance of an uneven surface, amber color and heavy smoke. Users are advised to make sure the temperature is stable before applying the product. An exothermic reaction could occur if the temperature is too high, while an overtly low temperature could stop product curing. This is why it is better to run certain tests before commencing with the product. Heating the product to prevent bubbling could also cause an exothermic reaction. Make sure the substrate is dry. Avoid applying this product on substrates with high humidity/moisture levels. Make sure the moisture content of said substrate is <4% before applying the product. Avoid using the product for exterior applications.

The quality of these products have been guaranteed by Chemtec. However, the fact that they have no control over factors like surface preparation, operating conditions or application procedures means the company cannot guarantee any result. Clients are therefore employed to test the products before commencing with them. You can always contact us for additional info regarding the product limitations.

Epoxy Coating: *EPOXY CASTING*

AVAILABLE COLORS

Clear

Please refer to our most recent Safety Data Sheet material before commencing with this product

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