Technical Data Sheet

Epoxy Casting System : *CHEM-CAST* Updated : March 2019

CHEM-CAST

High performance Casting epoxy system 100% solid and UV resistant

DESCRIPTION

The CHEM-CAST CASTING EPOXY SYSTEM is a two-component epoxy coating system which is VOC-free, 100% solids and odor free. This product can be poured at thick levels (up to 2 inches) while keeping a crystal-clear look. It can be poured at thicker levels depending on the volume sought. It has been formulated for casting applications. It displays excellent air release and color retention capabilities. It also possesses superior mechanical properties such as impact resistance.

USES

Casting applications on various substrates. It can be poured on concrete, wood, metal, granite, rocks, etc. We recommend performing adequate adhesion tests prior to using the product.

ADVANTAGES

- Excellent UV resistance
- Crystal clear
- Can be poured at very thick layers
- Ultra-low viscosity, very nice glossy finish
- Environment friendly (100% solids, VOC-free and no solvent)
- Odor free
- Easy application with ultra-long pot life and working time
- Ideal for casting

APPLICATION DATA

Mix Ratio	2A:1B
Color	Clear
Shelf Life	One year, in original unopened factory pails under normal storage conditions
Applic. temp.	20°C

CURING TIME

The curing time of this product will depend on thickness and the shape of the volume poured. Curing times can differ significantly depending on the quantity poured at once, the shape sought and ambient temperature. It is recommended to apply the product when room temperature is stable (close to 20 degrees). If applied at low temperature, the product might not cure properly. High ambient temperature might create an exothermic reaction (refer the product Limitations section). Heating the product will help prevent the creation of bubbling but could trigger an exothermic reaction (refer to product Limitations section). We do not recommend exceeding a thickness of 2 inches if the application area is large. For very small applications areas or shapes, a thicker amount can be used. It is imperative to performing adequate tests prior to using the product.

APPLICATION

Apply only when air and substrate temperature is close to 20ºC. Make sure the working area is dust free. Make sure to prepare a screen to protect the surface once your work is completed since dust, particle and other objects could fall in the epoxy prior to complete cure. This would have a negative impact on the final result.

If porous, the surface needs to be sealed by brushing or rolling the CHEM-NATURAL in a thin layer. Once the seal coat is Tack Free you can start the pouring process. Sealing the substrate is critical since the surface pores could create bubbles. Once sealed, the product can be poured on the surface. The product can also be gently heated to prevent the entrapment of bubbles.

MIXING

Mix two parts of A and one part of B together in a separate container. If the ratio is not respected, the product might not cure. The mixing container must be clean and free of any outside particle. Mix thoroughly for three/four minutes. Avoid mixing too fast in order to avoid the entrapping of air in the product. Larger quantities will require longer mixing times. Make sure to mix until the appearance of the product becomes even in the container. No cloudy or milky appearance should remain.

Never mix more than one gallon at the time. Lesser quantities are recommended for beginners. Mix only the necessary quantity to be used. If drops of unmixed material falls on the surface of your work, it will affect the curing and the look of the finished product since those drops will not properly react with their counterparts.

CLEAN UP

Excess liquid A and B material should be mixed together and allowed to cure. Cured product may be disposed of without restriction. Uncured material should be stored in a suitable and sealed container and may be disposed in accordance with provincial and federal regulations.

LIMITATIONS

The curing time of this product will depend on thickness and overall volume poured. Curing times can differ significantly depending on the quantity poured at once and the shape of the volume poured. If the overall volume poured at once is too large, an exothermic reaction will occur. An exothermic reaction can create unwanted events such as an uneven surface, an amber color or even smoke. It is also recommended to apply the product when room temperature is stable (close to 20 degrees). If room temperature is too high, the product will create an exothermic reaction. If applied at low temperature, the product might not cure properly. We strongly recommend performing tests prior using the product. Heating the product to prevent bubbling could also create an exothermic reaction. Requires a dry substrate. This product should not be applied to substrates that show high levels of moisture/humidity. Moisture content of the substrate must be <4% prior to application. Not suited for exterior applications. Chemtec stands behind the quality of its products. However, Chemtec cannot guarantee final results since Chemtec has no control over surface preparation, operating conditions and

application procedures. Customers are solely responsible to test Chemtec's products to determine if they perform as expected. Contact Chemtec for further information regarding the limitations of this product.

APPLICATION

Apply only when air and substrate temperature is close to 20ºC. Make sure the working area is dust free. Make sure to prepare a screen to protect the surface once your work is completed since dust, particle and other objects could fall in the epoxy prior to complete cure. This would have a negative impact on the final result.

If porous, the surface needs to be sealed by brushing or rolling the CHEM-NATURAL in a thin layer. Once the seal coat is Tack Free you can start the pouring process. Sealing the substrate is critical since the surface pores could create bubbles. Once sealed, the product can be poured on the surface. The product can also be gently heated to prevent the entrapment of bubbles.

MIXING

Mix two parts of A and one part of B together in a separate container. If the ratio is not respected, the product might not cure. The mixing container must be clean and free of any outside particle. Mix thoroughly for three/four minutes. Avoid mixing too fast in order to avoid the entrapping of air in the product. Larger quantities will require longer mixing times. Make sure to mix until the appearance of the product becomes even in the container. No cloudy or milky appearance should remain.

Never mix more than one gallon at the time. Lesser quantities are recommended for beginners. Mix only the necessary quantity to be used. If drops of unmixed material falls on the surface of your work, it will affect the curing and the look of the finished product since those drops will not properly react with their counterparts.

CLEAN UP

Excess liquid A and B material should be mixed together and allowed to cure. Cured product may be disposed of without restriction. Uncured material should be stored in a suitable and sealed container and may be disposed in accordance with provincial and federal regulations.

LIMITATIONS

The curing time of this product will depend on thickness and overall volume poured. Curing times can differ significantly depending on the quantity poured at once and the shape of the volume poured. If the overall volume poured at once is too large, an exothermic reaction will occur. An exothermic reaction can create unwanted events such as an uneven surface, an amber color or even smoke. It is also recommended to apply the product when room temperature is stable (close to 20 degrees). If room temperature is too high, the product will create an exothermic reaction. If applied at low temperature, the product might not cure properly. We strongly recommend performing tests prior using the product. Heating the product to prevent bubbling could also create an exothermic reaction. Requires a dry substrate. This product should not be applied to substrates that show high levels of moisture/humidity. Moisture content of the substrate

must be <4% prior to application. Not suited for exterior applications. Chemtec stands behind the quality of its products. However, Chemtec cannot guarantee final results since Chemtec has no control over surface preparation, operating conditions and application procedures. Customers are solely responsible to test Chemtec's products to determine if they perform as expected. Contact Chemtec for further information regarding the limitations of this product.

AVAILABLE COLORS

Clear

Refer to the most recent Material Safety Data Sheet prior using this product

Revêtements CHEMTEC
913, rue Michelin, Laval, QC, Canada, H7L 5B6
Téléphone : 450-629-1717 / Free : 1-844-829-1717