



CRAFT EPOXY SYSTEM TECHNICAL DATA SHEET

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CRAFT EPOXY

KEY FEATURES

Candi Art Craft Epoxy (Counter Top Epoxy) is a UV stabilised (slow to yellow compared to non-stabilised epoxies) epoxy system.

Cast in thin layers between 1mm-3mm thickness.

To be poured over a variety of surfaces to provide a strong, high gloss coating.

A fairly high viscosity epoxy (thick with low flow).

NOT approved for food contact and not suitable for heat contact or exposure above 80°C.

MATERIAL PROPERTIES

Mix Ratio By Weight	100A:41B
Mix Ratio By Volume	2A:1B
Mixed Viscosity – CPS (ASTM D2393)	1100
Specific Gravity – Mixed; g./c.c. (ASTM D1475)	1.09
Spec. Volume – Mixed; cu.i./lb (ASTM D792)	25.4
Pot Life – in a 300g mass (ASTM D2471)	45 minutes
* Thin Film Working Time	2 hours
* Thin Film Tacky Recoat Time	6 hours
* Thin Film Tack Free Time	8 hours
Cure Time	16 hours
Colour – Mixed	Clear
** Shore D Hardness (ASTM D2240)	75

Notes:

* Measured at 1/16" (1.6mm) thickness

** Value measured after 7 days at 23°C

PROCESSING

The Candi Art Craft Epoxy should be stored and used at room temperature (23°C). Wear long sleeve clothing, disposable gloves and safety glasses. Have all materials and tools ready before you begin;

- Measuring cups
- Mixing containers
- Craft stick or Silicone Spatula
- Propane / Butane Torch
- 90% Isopropyl Alcohol
- Disposable Gloves



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Mixing containers should be made of plastic, metal or wax coated paper. Due to high temperature potential (exotherm) of the Candi Art Craft Epoxy, do **NOT** use glass or foam containers.

VENTILATION

Use only in a well-ventilated area and avoid breathing in any fumes. Wearing an approved respirator is highly recommended.

USING CRAFT EPOXY TO COAT BAR TOPS

Most bar tops will require 2 – 3 layers of the Candi Art Craft epoxy with a 4-hour cure time between layers. You can apply as many 6.4mm layers as required.

To work how much Candi Art Craft Epoxy you will require – you can correlate the square inch (cm) area of your bar top with the yield of mixed Candi Art Craft Epoxy.

CANDI ART CRAFT EPOXY – COVERAGE RATES

Amount	Poured at 1.6mm	Poured at 3.2mm	Poured at 6.4mm
28.3grams	164cm ²	82cm ²	41cm ²
Trial Unit (1.28kg)	0.74m ²	0.37m ²	0.19m ²
Gallon Unit (5.08kg)	2.97m ²	1.48m ²	0.74m ²
5 Gallon Unit (25.62kg)	15m ²	7.5m ²	3.75m ²

SURFACE PREPARATION

- Make sure that all surfaces are completely dust free and dry. They must be free of any oils and contaminants;
- Make sure your surface is level before you apply the Candi Art Craft Epoxy;
- Do **NOT** use on surfaces that are coated with an oil-based stain, as this will cause it to delaminate;
- Water based stains are compatible;
- Non-porous surfaces, such as tiles and glass do not require priming;
- Porous surfaces (wood and cement) should be primed to prevent air bubbles being released from the surface when the Candi Art Craft Epoxy is applied. But usually, the Candi Art Craft Epoxy is applied only in thin layers it should be possible to pop all bubbles by torching shortly after casting;
- You can also prime, to remove air bubbles from porous surfaces, with a water-based paint

NEVER use an oil-based paint under the Candi Art Craft Epoxy.



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MIXING

Proper mixing is key to a successful epoxy project. Poor mixing will lead to defects which may often be cloudy streaks or patches in the cured Candi Art Craft Epoxy. These defects cannot be removed. It is better to measure the component of the Candi Art Craft Epoxy by weight rather than by volume!

- Mixing Ratio by weight
 - 100 Resin (Part A) : 41 Hardener (Part B)
- Mixing Ratio by volume
 - 2 Resin (Part A) : 1 Hardener (Part B)
- Measure accurately with a scale in grams or ml;
- Shake Hardener (Part B) container well for 1 minute before dispensing;
- Accurately measure out the Resin (Part A) into the mixing cup, then measure out the Hardener (Part B) in a separate mixing cup;
- Once you have measured correctly and you have the right quantity of each then add the Hardener (Part B) to the Resin (Part A) and mix;
 - Mix together for 3 – 5 minutes using a flat edge wooden craft stick or silicone spatula;
 - Don't forget to scrape the sides and the bottom of your mixing cup at least several times;
- Pour the mixed Candi Art Craft Epoxy into a clean mixing cup and mix again for another 2 minutes;
 - If you choose to use a drill mixer, use a variable speed mixer set to low rpm and mix for 2 minutes;
 - Remember creating a vortex will introduce air and create bubbles;
 - Follow hand mixing for another 2 minutes

Remember that a large concentrate of mixed Candi Art Craft Epoxy will reduce the pot life and may become too hot to handle:

- If concentrated mass of mixed Candi Art Craft Epoxy begins to get very hot, move outside to open air if you are in doors;
- To extend working time, reduce mass by pouring mixture into a flat baking pan and pour onto bar top from there

DO NOT VACUUM – This will introduce air.

POURING OF THE CANDI ART CRAFT EPOXY

- After mixing, pour a thin stream along the entire edge of the surface;
- Do **NOT** exceed 1.6mm for this layer;
 - Remember your goal is to obtain an even coating
- Let the Candi Art Craft Epoxy cure for 4 hours before applying another layer;

Do **NOT** exceed 6.4mm thickness per pour. If greater thickness is required, pour in layers of 6.4mm per layer with 4 hour minimum between layers.



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Note: For coating bar tops, a minimum thickness of 3.2mm or two layers is recommended.

- Non-porous surfaces do not require a sealing coat;
- Mix and pour the Candi Art Craft Epoxy as directed above to 6.4mm thickness;
- Look for bubbles and lightly pass your torch over the surface to dissipate the air bubbles;
 - Do not get too close to the surface (7 – 8cm away from your surface should be sufficient)
- Let the Candi Art Craft Epoxy cure

ADDING NEW EPOXY TO OLD EPOXY

If too much time has passed between applying layers of Candi Art Craft Epoxy, delaminating may occur if you try to add more.

For Best results:

- Lightly sand cured epoxy surface with 220 grit sand paper and wipe clean with denatured alcohol before mixing and apply new Candi Art Craft Epoxy.

ADDING LIQUID COLOURANTS AND POWDER PIGMENTS

Candi Art liquid colourants and pigments stir in very easily. These can be added at any time. Some other pigment types do not mix in as easily and these should be mixed as follows:

- Pigment first, then add Resin (Part A) and mix;
- Then add Hardener (Part B) and mix well as per above

Do **NOT** add more than 6% of the total Candi Art Craft Epoxy mass unless you have tested it.

REMOVING EPOXY

90% Isopropyl Alcohol will remove uncured Candi Art Craft Epoxy from most surfaces. It can also be used to clean the surface of cured Candi Art Craft Epoxy. Alcohol is flammable. Follow all safety precautions for handling flammable liquids and provide adequate ventilation and use the necessary safety equipment.

APPLYING A RELEASE AGENT

Ease Release 200, can be used to effectively release cured epoxy castings to prevent adhesion on non-porous surfaces like metal, glass, melamine, or acrylic sheeting. We suggest using Ease Release 100. This product can be ordered by contacting Candi Art directly.

IMPORTANT NOTES



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- ❖ Do not mix an entire unit at once unless you are experienced;
 - Use small amounts as needed for your project and increase as needed
- ❖ Remember larger volumes will generate more heat and if mixed and casted in larger volumes than indicated can generate enough heat to melt plastic mixing cups, burn skin or even ignite combustible materials. Take care and reduce casting thickness when working in environments warmer than 23°C;
- ❖ Do not contaminate the two components (Resin and/or Hardener), always keep them separated from each other;
- ❖ It is **NOT** a good decision to mix different brands of Epoxy Resin and Hardener together;
- ❖ Do not use epoxy resin outdoors or on unclean surfaces;
- ❖ Avoid applying epoxy onto oily or contaminated surfaces;
- ❖ Avoid applying epoxy onto damp or wet surfaces;
- ❖ Epoxy resin does **NOT** bond to **Teflon, polyethylene, polypropylene, nylon, or mylar**;
 - It also bonds poorly to polyvinyl chloride, acrylic and polycarbonate plastics;
 - The only way to tell if an epoxy will bond to a material is to test it first
- ❖ Remember **epoxy hates moisture**, and some epoxy systems hate it more than others. It's why we stress using pigments explicitly designed for epoxy system, because the moisture in paints and food colourings can keep the resin from curing;
- ❖ Make sure your work surface is clean;
- ❖ Avoid working in direct sunlight, as this will cause your epoxy to yellow;
- ❖ Only dispose of your excess epoxy once it has hardened;
 - Do not pour your un-hardened epoxy down the drain
- ❖ Remember that epoxy sets much faster at warmer temperatures, so only mix what you require for your project;
- ❖ Keep your epoxy bottles tightly sealed at all times and don't store them in extreme heated areas / temperature as this will shorten the shelf life;
- ❖ Do not store your epoxy in cold areas / temperature as this will shorten the shelf life;
- ❖ Do not mix your caps up between PART A (Resin) and PART B (Hardener);
- ❖ Do not use your pre-mixed epoxy for your project after it has started getting hot;
- ❖ Do not use your pre-mixed epoxy for your project after it has started to thicken;
- ❖ Do not use an epoxy batch the you have mixed if you are not sure your mixing ratio was correct;
 - Set it aside and mix a new batch
- ❖ Do not mix your epoxy in an unclean container / mixing cup;
 - Always use clean containers / mixing cups to mix your epoxy in
- ❖ Do not spread epoxy with a foam or sponge spreader, rather use a craft tick or silicone spatula;
- ❖ Do not forget to allow extra time for epoxy to cure when working at lower temperatures;
- ❖ Even though these materials are UV stabilised to promote "anti-yellowing", ambering or yellowing will occur if continually exposed to harsh UV environments;
- ❖ Don't make any assumptions;
 - If you are unsure of anything contact Candi Art for any assistance



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SAFETY

Candi Art Craft Epoxy: Resin (Part A)

WARNING : IRRITATION TO EYES, SKING AND MUCOUS MEMBRANES

Resin is irritating to the eyes and skin. Avoid prolonged or repeated skin contact to prevent possible sensitisation. Avoid breathing vapours and use only with adequate ventilation. Wear personal protective equipment at all times.

First Aid: In case of eye contact, flush thoroughly with water for 15 minutes and get immediate medical attention. In case of skin contact, wipe clean with white vinegar and wash thoroughly with soap and water. If irritation persists, get medical attention. If swallowed, do **NOT** induce vomiting. Drink 1 -2 glasses of water and get immediate medical attention. If vapours are inhaled if breathing becomes difficult, remove person to fresh air. If symptoms persist, seek medical attention.

Keep out or reach of Children.

Candi Art Craft Epoxy: Hardener (Part B)

WARNING : IRRITATION TO EYES, SKING AND MUCOUS MEMBRANES

Hardeners are corrosive materials and can cause severe eye and skin burns. They are sensitisers that may cause dermatitis from skin contact or vapour inhalation. Use these products only with adequate ventilation and wear personal protective equipment at all times. Remove contaminated clothing and wash from skin with soap and water.

First Aid: In case of eye contact, flush thoroughly with water for 15 minutes and get immediate medical attention. In case of skin contact, wipe clean with white vinegar and wash thoroughly with soap and water. If irritation persists, get medical attention. If swallowed, do **NOT** induce vomiting. Drink 1 -2 glasses of water and get immediate medical attention. If vapours are inhaled if breathing becomes difficult, remove person to fresh air. If symptoms persist, seek medical attention.

Keep out or reach of Children.

Disclaimer: The information contained in this is considered accurate. However, no warranty is expressed or implied regarding the accuracy of the data. User shall determine the suitability of the product for the intended application and assume all risk and liability whatsoever in connection therewith.

Uncured epoxy can be removed by scraping as much material as possible from the surface using a paint scraper, acetone or isopropyl alcohol can be used to remove the residue that is left.

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