

# Technical Data Sheet



**W V C O**

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Partnering through service,  
innovation, and integrity

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# E-100 EPOXY

## Two-Component Clear Epoxy Coating

### DESCRIPTION

E-100 Epoxy is an ultra-clear, high-gloss finish, faster set epoxy versatile enough to be used on most surfaces: especially wood either smooth or rough, stained or painted. E-100 forms a thick, durable, high gloss, clear finish for tables, clocks, game boards and furniture. Embed coins, rocks, sea shells, flowers or any non-waxy material. Preserve pictures, photographs, posters, signs and ceramics. This easy-to-use, 1:1 mix ratio is ideal for house hold and craft projects. For industrial or large projects it is best applied using WVCO metering system. Just one application equals 60 coats of varnish.

### WHERE TO USE

- Industrial Coating Applications
- Table Tops, Bars and Counters
- Molding, Furniture
- Any Wood, Glass, Ceramic, Metal or Painted Surface
- Jobsite Commercial Coating Applications

### FEATURES AND BENEFITS

- High build – just one pour equals 60 coats of varnish
- Easy to use – no measuring errors; easy 1:1 mix ratio
- Versatile – may be used on any non-waxy material
- Self-leveling – minimal spreading required
- Great Moisture Resistance
- Crack and Shrink Resistant

### PACKAGING

- 1 quart kits
- 2 quart kits
- 1 gallon pails
- 5 gallon pails

### SHELF LIFE

12 months when properly stored.

### STORAGE

Store this product in a clean, dry, shaded or covered environment above 45°F. DO NOT FREEZE.

## TECHNICAL INFORMATION

### TYPICAL PROPERTIES

Solids		100%
Density – lbs./gallon (kg/L)	Part A	9.8 (1.176)
	Part B	8.1 (.97)
Viscosity (centipoise)	Part A	2615
	Part B	2075
Consistency		Thin liquid
Pot Life – at 77°F (25°C) in 100 mls or ½ cup (varies with quantity and temperature)		10 minutes
Color (other colors available upon request)		Clear
Thin Film Set Time at 20 mils @ 77°F (25°C)		40 minutes
Hardness – Shore "D" (on fully cured material)		85

### CURE TIME

Remember that the person applying E-100 epoxy should not mix more than can be used in about 5 minutes. The mixture sets up in 10-15 minutes depending on working temperature. At temperatures above 80°F the epoxy will be tack-free in about 3 hours. Full cure is dependent on temperature from 72 hours to 1 week. We do not recommend hand mixing more than 1 quart of A and 1 quart of B together at one time. Cure time will vary with humidity and temperature: dust-free-3 hours; handling-24 hours; full cure-72 hours

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## APPLICATION

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Please read all directions before using. Mix product 1:1 ratio. Always test a small area before full use. Best when used between 70 and 85°F (21 and 29°C).

Step 1 – Surface must be dry, sanded and free from dirt, dust, grease, wax or oil. Do not apply over damp or waxed surfaces.

Step 2 – Cover the work area with waxed paper or equal. Elevate object to be coated on supports, i.e. paper cups. Be sure object is level. Have dust cover ready to use after pour.

Step 3 – Pour equal parts side A and side B (1:1 ratio) into a clean, un-waxed disposable paper cup or tub. Mix with slow consistent revolutions in order to minimize trapping excess air bubbles into mixture. Stir combined parts A and B with a folding-into-center motion for at least 2 minutes, occasionally scraping sides, bottom and cleaning stir stick off several times on mixing container. To prevent problems with inadequate mixing, we suggest using a “double cup” method of mixing. Have two mixing containers ready and begin mixing in the first clean mixing container. After one minute of mixing, transfer E-100 Epoxy mixture into the second container and continue mixing for one more minute. Inadequate mixing is the most common reason for imperfect results. Mix in small batches.

Step 4 – Once thoroughly mixed, pour E-100 Epoxy on the center of the surface to be covered. Follow by spreading the mixture over the entire area with a plastic spreader or stiff card.

Step 5 – Allow fresh pours to cure in a warm room (70°F / 21°C). Place a cover at least 3” above coated surface area to protect from dust particles when drying. In 6 to 12 hours, drip points may be removed from the backside of the product with a light sanding.

Step 6 – When surface is still wet, air bubbles can be easily removed by gently blowing up and away. For larger areas we recommend using a propane torch. Move the torch in fast side-to-side motion to avoid burning the epoxy. It is carbon dioxide, not the heat which breaks the bubbles.

Wood Surfaces: Since most woods are porous, seal the surface with a thin coat of E-100 applied with a squeegee to help prevent air bubbles from forming while the main pour is in process.

DO NOT USE additional hardener with the mix for the purpose of speeding up the cure time. Extra hardener has the opposite effect. It just slows down the cure time and softens the patch. Best results are achieved by mixing one to one by volume.

Please contact your Willamette Valley Company Representative for information on using a metering system.

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## NOTES

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As it is true with most epoxies, prolonged exposure to direct sunlight will cause the cured epoxy to yellow and degrade over time. Avoid applications of E-100 Epoxy in areas where direct exposure to sunlight is expected. E-100 should not be used on ash trays or cookware and is not recommended for use on floors.

E-100 is heat resistant to approximately 120°F / 49°C after fully cured. Place some type of protection such as coasters or hot pads when placing hot objects on E-100 Epoxy surfaces.

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## CLEAN-UP

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Use soap and water before the material solidifies, otherwise use acetone for tool cleanup. Caution: Always use plenty of soap and water to cleanse hands.

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## HEALTH AND SAFETY

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Before handling, you should become familiar with the Material Safety Data Sheet (MSDS) regarding the risks and safe use of this product. To obtain an MSDS please call 800-333-9826 or send an email to: [msds@wilvaco.com](mailto:msds@wilvaco.com).

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## CONTACT INFORMATION

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Please see the side bar on the front page for the Division nearest to your location

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