AC-312 EPOXY

Premium High-Viscosity Table & Counter Top Coating

WITH ADDED UV INHIBITORS

BDC EPOXY SYSTEMS, INC. **TECHNICAL DATA SHEET**

DESCRIPTION

AC-312 is a premium, two-component, 100% solids, high-viscosity epoxy coating. Its high-build body holds thickness with controlled flow and cures to an exceptionally strong, glass-like, distortion-free finish. It is formulated with an added UV-inhibitor package for improved resistance to UV-induced yellowing. The cured film is clear and high-gloss. **VOC < 5 g/L.**

USES

Engineered for tabletops, bar tops, and counter tops, AC-312 offers the strength, durability, and scratch resistance to stand up to daily use. Its high-build body also makes it well suited to coating wood, picture plaques, photographs, plaster, art, craftwork, and DIY projects.

COVERAGE

As a pour/flood coat, one gallon typically covers 20–30 sq ft per coat. Actual coverage varies with substrate, temperature, and applied thickness.

NOTE *Pouring thicker than 1/8" in a single pass over a large surface may cause excessive bubbles, yellowing, or surface distortion. Build to greater thickness with multiple coats.*

COLORS

Supplied clear. Water-based universal colorants may be added to achieve the desired appearance; epoxy dyes and metallic pigments may also be used.

PACKAGING

- 1 Gallon Kit — 2 × 0.5-gal jugs per kit, 2 kits per case
- 2 Gallon Kit — 2 × 1-gal jugs per kit, 2 kits per case
- 10 Gallon Kit — 2 × 5-gal pails per kit
- 110 Gallon Kit — 2 × 55-gal drums

Mix ratio: 1 part Side A Resin : 1 part Side B Hardener, by volume (1A : 1B).

SURFACE PREPARATION

Surfaces must be dry and free of dust, wax, grease, oil, and other contaminants, and should be sealed. For wood, apply 2–3 coats of a lacquer sanding sealer, sanding lightly between coats. Raise the item roughly 2" above the work surface so excess epoxy can drip off, and place newspaper, cardboard, or a drop cloth beneath to catch drips. Applying electrical tape or paste wax along the underside edges eases drip removal — pull the tape once the epoxy has gelled or cured.

MEASURING

Mix only the amount you need at one time; return unused resin and hardener to their original containers. Measure 1 part Side A Resin to 1 part Side B Hardener by volume. Do not alter the ratio — excess hardener or resin will leave the coating tacky, cause discoloration, or produce other undesirable results, including soft or sticky spots.

TOOLS

- **Mixing container —** smooth, flat-bottomed, clean, and dust-free.
- **Stir stick —** flat, straight edge for thorough mixing — popsicle sticks for small mixes, 1-gal paint sticks for larger.
- **Brush —** a small brush helps coat edges and crevices.
- **Gloves —** powder-free nitrile or latex; keep extras on hand.
- **Propane torch —** for releasing surface bubbles.

MIXING

Combine the pre-measured resin and hardener in a clean container and stir thoroughly for 2–4 minutes with steady strokes — avoid whipping, which introduces bubbles — scraping the sides and bottom to reach any unmixed material. Continue until all swirls disappear; some bubbles are normal.

PRO TIP *Transfer the fully mixed batch to a second clean container and stir an additional 60 seconds to eliminate any hidden unmixed material.*

NOTE *Do not mix more than 1 gallon at a time. Left as a concentrated mass in the mixing container, the combined resin and hardener will begin to heat up after about 5 minutes — the larger the batch, the faster and hotter the reaction — so pour it out promptly and never let a mixed batch stand in the container. Once spread into a thin coat the material sheds heat, and the 5–10-minute wait described in the Application step applies.*

APPLICATION

As soon as AC-312 is mixed, pour it evenly over the surface and spread with a gloved hand, brush, or notched spreader at roughly 20–30 sq ft per gallon; a small brush helps at edges and hard-to-reach areas. Wait 5–10 minutes after application, then wave a propane torch 4–6 inches above the surface to release bubbles. A second pass 5–10 minutes later is acceptable if bubbles return.

NOTE *Do not over-torch and never let the flame touch the epoxy. Over-torching, or torching too late into the cure, can leave ripples or dents in the finish.*

DRIP REMOVAL

1. **Tape / wax —** before pouring, mask edges or the back with electrical tape or paste wax; once cured, peel the tape and the drips release with it.
2. **Sand / grind —** drips may be sanded or ground off after full cure if tape was not used.
3. **Wipe —** 1.5–2.5 hours after pouring, run a popsicle stick or gloved finger along the underside edge to clear forming drips.

DRYING & CURE TIME

Dry to touch in 8–10 hours. A second coat may be applied within 24 hours. After 24 hours, lightly sand to de-gloss and wipe with acetone before recoating — sanding scratches fill in

and disappear under the next coat. One coat usually achieves a glossy, high-build shine; additional coats may be applied as desired. For interior use only.

CLEAN UP

Clean tools with acetone while the product is still liquid. Once cured, remove mechanically by sanding or grinding, or with a strong chemical stripper. Clean immediately after use.

LIMITATIONS & STORAGE

- Store in a dry place between 50–95 °F, out of reach of children.
- Use opened resin and hardener within 1 month; opened hardener will begin to yellow in the container.
- Apply where humidity is under 60% and temperature is 70–80 °F.
- Use within one year of purchase for best clarity and results.
- UV inhibitors provide UV resistance, not UV stability — for interior use only.

WARRANTY

BDC Epoxy Systems guarantees this product to be free from manufacturing defects and to comply with our published specifications. Should the buyer prove that goods received do not conform to these specifications or were defectively manufactured, the buyer's remedy shall be limited, at the seller's option, to return of the goods and repayment of the purchase price or replacement of the defective material. BDC makes no other warranty, expressed or implied, and all warranties of merchantability and fitness for a particular purpose are disclaimed. The manufacturer/seller shall not be liable for prospective profits or consequential damages arising from use of this product, nor for material used beyond its shelf life. For product dating, refer to the batch number on the product or contact BDC.

TECHNICAL DATA

Property	Typical Value
UNCURED / REACTIVITY	
Brookfield viscosity, cps @ 25 °C	3,500–4,000
Gel time, min (200-g mass @ 25 °C)	35–45
Pot life, min (200-g mass @ 25 °C)	20–30
COATING PROPERTIES — 20-MIL FILM	
Drying time, hr — set to touch	8–10
Drying time, hr — through-dry	24
CURED CASTING PROPERTIES — 1/8" CASTING[1]	
Shore D hardness (0–10 sec)	82
Tensile strength, psi	6,000
Ultimate elongation, %	6
Flexural strength, psi	9,500
Flexural modulus, psi	330,000
Compressive strength, psi (at yield)	11,000
Taber abrasion, mg loss — ASTM D4060, CS-17 wheel, 1000-g load, 1000 cycles	45

[1] Cured 7 days at approx. 25 °C. Values are typical estimates based on the formulation and comparable systems, pending laboratory confirmation, not specifications, and are subject to normal manufacturing variation.