



**DESCRIPTION**

**ECOLAB-EPOX100** is a two-component, 100% solids, low viscosity clear epoxy coating that provides an attractive, tough and durable finish. **ECOLAB-EPOX100** is versatile, and can be applied as a smooth or non-slip coating, depending on the customer’s requirement. Its exceptionally low odour allows the product to be used in areas where other products cannot be used such as shopping malls, hospitals, restaurants, etc.

**WHERE TO USE**

**ECOLAB-EPOX100** is recommended for use in areas with light to medium duty traffic, particularly decorative applications. **ECOLAB-EPOX100** is ideal for hospitals, laboratories, retail, shopping malls, locker rooms, washrooms, dealership showrooms, institution buildings, fire stations, garage floors, aircraft hangers, warehouse facilities, storage areas, recreational complexes, studios, auto body and workshops, and etc.

**ECOLAB-EPOX100** is also well suited for use as a topcoat sealer for concrete countertops. It may also be used for decorative multi-colour epoxy flooring as well as a variety of other decorative applications such as clocks, plaques, and any other interior decorative items that will not be subjected to direct heat.

**BENEFITS**

- 100% solids, odourless; zero VOC’s
- Easy to apply, clean, and maintain.
- Attractive high gloss finish with good gloss retention
- Enhances the appearance of the concrete
- Resistant to staining and yellowing
- Slight ambering even outdoor
- Exceptionally high surface hardness
- Excellent bond to concrete
- Tough, highly durable
- Outstanding water & water spotting resistance

**HANDLING PROPERTIES**

23°C (74°F)

Mix Ratio, by volume .....	2 parts A: 1 part B
Viscosity (Mixed) .....	900 cps
Solids Content .....	100 %
Mixed Weight (Density) .....	1.2 kg/L (10 lb./US gal)
Pot Life (working time) .....	30 minutes
Thin Film Set Time .....	12-16 hours
Foot Traffic (re-coat time) .....	16 hours
Light Vehicular Traffic .....	24 hours
Full Cure and Maximum Resistance .....	7 days
Hardness (Shore D) .....	80

**Cured Properties @ 23°C (74°F)**

Tensile Elongation .....	10% @ break (ASTM D638-86)
Tensile Strength.....	20 MPa (2900 psi) (ASTM D638-86)
Hardness (Shore D) .....	80 (ASTM D2240-86)
Impact Resistance .....	pass 160 in./lb. (ASTM D2794)
Abrasion Resistance (ASTM D4060) .....	84mg loss Taber Abrasion, C-17 Wheel, 1000 cycles

**SURFACE PREPARATION**

**ECOLAB-EPOX100** should be applied over clean, sound, dust-free surfaces. For best results, surface should be prepared as follows.

**Existing Epoxy Floor:**

Make sure the floor is clean and free from oil or grease. The floor must be sanded with 80-100 grits to provide profile for adhesion. Ensure that the existing floor is sound and adhered well to the concrete. Epoxy coating would not adhere to alkyd or oil based coated floors.

**Concrete (New):**

Shotblast or equivalent to remove surface laitance, curing compounds or form oils. Concrete should be minimum 28 days old or have 3% or less moisture content. Moisture content can be determined using the test method ASTM D4263.

**Concrete (Old):**

Remove oil, grease, dirt and any unsound concrete using a combination of commercial de-greasers, alkaline wash, shot blasting or diamond grinding. A combination of acid- etching and power wash can also be used. Cracks and surface defects should be repaired prior to the application of the coating.

**Steel:**

Remove greases, oils and contaminants from surfaces and sandblast to white metals. Prime using ADHL-PRIMER.

**CRACK REPAIR**

Because of the nature of the product, all floor imperfections will show through the final coating, which makes it critical to have an almost perfect floor prior to the application of the clear topcoat.

If the level of crack repair and imperfections is excessive, we do not recommend using clear epoxy. If the cracks are minimal, use BENEFITS FLOORING APPLICATION ADHL-FILL-CRACK Type 3 clear epoxy gel. Grind the surface after the gel is firmly cured to smooth it for the application of the topcoat.

**AREA PREPARATION**

For optimal performance, both the coating and substrate should be maintained at 18 to 30°C (68 to 86°F) for 24 hours prior to beginning work. The same temperature range should be maintained during mixing, application, and cure.

Application in direct sunlight and rising surface temperatures may result in blistering of materials due to expansion of entrapped air or moisture in the substrate. Concrete that has been in direct sunlight must be shaded 24 hours prior to application and remain shaded until after the initial set.

**OFF-GASSING**

The off-gassing is not a by-product of the epoxy coating, but of the displacement of air in the concrete.

It depends on the density/PSI (compressive strength of the concrete); the lower the psi and/or water added to the concrete during pouring, the more offgassing in the concrete. If the concrete is spongy or very porous, it is recommended to apply an epoxy primer first (refer to product data sheet or call Adhesives Lab for recommendations). Alternatively add 2% of Solvant to ECOLAB-EPOX100 to facilitate the penetration, the priming coat must be very thin and be pulled tight with a flat squeegee. If you need to have a thicker film to smooth the concrete, it is recommended, after the first pass, to apply wet on wet within 30 minutes at 8 mils film thickness.

**PRIMING**

ECOLAB-EPOX100 is a self-priming product that requires no primer when the concrete substrate is dry.

**APPLICATION**

The mixing equipment used to mix the coating must be clean and free of any contaminants that may be present in the equipment from previously used products. Two coats are recommended (one prime coat and one top coat) The first coat is applied at 4 mils whereas the second coat is applied at 8 mils.

- Pre-mix at low speed component “A” of ECOLAB-EPOX100 first to ensure uniformity. Pour all of the liquid from Part B into a Part A container.
- Mix thoroughly using a slow speed 1/2 inch drill motor with “jiffy” type blade for two minutes (minimum). Scrape the sides of the container and continue mixing until the coating is uniform.
- Immediately pour all mixed coating onto the edges of the prepared floor and spread the material evenly with a flat squeegee. Use a lint free 6 mm nap roller to back roll the applied material to an even coat. Care should be taken not to over-roll the material as air may become entrapped in the coating.
- Apply the second coat in the same manner as the first (a notched squeegee may be used in the second coat to produce a thicker film).
- If a non-slip sanded surface is required, a properly graded, dry, contaminant free grit should be broadcast on the surface of the top coat and back roll to encapsulate the aggregate onto the coating.

- Allow to cure thoroughly overnight (16 hours) before exposing to foot or light duty traffic. It requires 24-36 hours for vehicular traffic and 7 days for full service. Keep water & detergent away from the floor until fully cured.

**Caution: Do not over mix or mix vigorously to avoid bubble formation, leading to a milky finish. Mix slowly and keep the blade deeper (away) from the surface during the mixing.**

## LIMITATIONS

- Do not apply ECOLAB-EPOX100 if the substrate and ambient temperature are below 12°C (54°F) or 18°C (65°F) for countertop applications.
- Do not apply the topcoat less than 10 mils as an orange peel finish may appear due to insufficient material to self-level.
- Do not leave mixed material (Part A & B together) in the container for an extended amount of time; it will harden and warm up and smoke.
- Not recommended for areas subjected to steam cleaning, harsh chemicals or heavy impact.
- Do not use over existing floor without testing both the inter-coat adhesion as well as the adhesion of the existing floor to concrete.
- Never apply the topcoat over tacky or partially wet primer.
- Not recommended as a water-proofing coating in suspended boiler rooms or commercial parking garages.
- Do not apply in areas where the humidity is greater than 85%.
- May discolor under direct constant exposure to UV, and due to some chemical exposures.
- Do not use on slab-on-grade without vapor barrier.

## COVERAGE

12 mil dry film thickness:

Prime Coat (4 mils): 10 m<sup>2</sup>/litre (400 ft<sup>2</sup>/U.S. gallon)

Second Coat (8 mils): 5 m<sup>2</sup>/litre (200 ft<sup>2</sup>/U.S. gallon)

## PACKAGING

3.79 litre (1 U.S. gal.) units

11 litre (2.9 U.S. gal.) kit units 56.7 litre (15 U.S. gal.) units

## CLEAN UP

Clean all tools and equipment with xylene prior to the material setting.

## SAFETY PRECAUTIONS

Consult the Material Safety Data Sheet (MSDS) for specific instructions.

## STORAGE

Store in a heated warehouse. Do not freeze.

## OTHER INFORMATIONS SHELL LIFE

Two years from the date of manufacture if kept in the original unopened containers under normal heated warehouse conditions.

## WARRANTY

Adhesiveslab Products. shall not be liable for any injury, loss, or damage (direct or consequential) arising from use or inability to use the products. Before using, the user is urged to pre-test the products in his/her own environment to determine the suitability of the products for their intended use, and the user assumes all risk and liability whatsoever in connection therewith.

Adhesiveslab Product's liability, if any, is limited to a refund of the purchased price or replacement of that portion of the merchandise proven to be defective. Adhesiveslab Products shall have no other liability, including liability for incidental, consequential or resultant damages, however caused, whether due to breach of warranty, negligence, or strict liability. This warranty may not be modified or extended by representatives of Adhesiveslab Products, its distributors or dealers."