ADHESIVES LAB

ADHL-HEMP

DESCRIPTION

ADHL-HEMP is a SYSTEM compromised of several different products & applications. First product is a two-component, 100% solids,FAST CURE(4-6 hours) PREMIUM quality low viscosity tinted epoxy coating that provides an attractive, tough and durable finish. ADHL-HEMP is versatile, and can be applied as a smooth or non-slip coat- ing, 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. This is mainly used in Cannabis facilities as a primer coat and a second heavy coat for maximum protection. A tinted white or grey ADHL-POLY83 polyaspartic coating is then applied at 12 mils as a finishing top coat for maximum traffic protection.

WHERE TO USE

ADHL-HEMP is recommended for use in areas with light to medium duty traffic, particularly create for the booming cannabis industry. ADHL-HEMP is also ideal for hospitals, laboratories, retail, shopping malls, locker rooms, wash- rooms, dealership showrooms, institution buildings, fire stations, garage floors, aircraft hangers, warehouse facilities, storage areas, recreational complexes, studios, auto body and workshops, and etc.

BENEFITS

- 100% solids, odourless; zero to low 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)

Mixing Ratio, by volume	2 parts A: 1 part B
Viscosity (Mixed)	1100 cps
Solids Content	100 %
Mixed Density	1.22 kg/L (10.1 lb./US gal)
Pot Life (working time)	15 minutes
Vehicular Traffic	4 hours
Full Cure and Maximum Resistance	3 days
Hardness (Shore D)	80
Abrasion Resistance	81 mg loss Taber Abrasion, C-17 Wheel, 1000 cycles

SURFACE PREPARATION

ADHL-HEMP 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, alka- line wash, shot blasting or diamond grinding. A combi- nation of acid- etching and power wash can also be used. Cracks and surface defects should be repaired prior to the application of the coating.

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.

Cured Film Properties m (7 days cure @ 23°C (74°F)/ 50% RH using 2% crosslinker

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 tem- peratures may result in blistering of materials due to expansion of entrapped air or moisture in the substrate. Concret 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 ADHL-EPOX-100 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 thick- er 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.

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. Three coats are recommended (one prime coat , heavy coat and one top coat) The first coat is applied at 4 mils whereas the second coat is applied at 8 mils and top coat is applied at 12 mils.

• Pre-mix at low speed component "A" of ADHL-HEMP 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 (mini- mum). Scrape the sides of the container and contin- ue 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.

Apply the top coat in the same manner as the first and second (a notched squeegee may be used in the final top coat to produce a thicker film).
• If a non-slip sanded surface is required, a properly graded, dry, contaminant free grit should be broad- cast 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.

Matte or Satin Finish:

We recommend switching ADHL-POLY 83 for ADHL-URE-W two coats of high scratch resistant clear waterborne urethane coating, over the epoxy to control the gloss and produce a very attractive finish. However, these products are recommended for foot traffic decorative applications such as retail stores and shopping malls, restaurants and bars, showrooms, studios, walkways, offices, and etc.

• The application rate required (of the diluted acid) is about 500-750 ml/ m2 (1.5 pints/ 10 ft2). Spray apply with a spray bottle to ensure uniformity.
• The acid solution should be worked onto the surface with a hard-bristled brush until complete wetting and coverage is obtained. The acid will react with the concrete surface and will bubble vigorously for a few minutes. During this time, brushing should continue. • After 10-15 minutes, the bubbling will have subsided and slurry will be left on the surface.

• It is essential to neutralize any possible acid surface conditions, which can impair adhesion. The concrete floor must be neutralized with a diluted solution of TSP and water followed by another thorough rinsing. • The finished surface should have a “medium sand- paper-like” texture.

• When dry, check the surface with a few drops of water; it should penetrate quickly. If not, re-etch the affected area(s).
• Allow the concrete to dry completely for two-days.

LIMITATIONS

• Do not apply the system ADHL-HEMP if the substrate and ambient temperature are below 12’C (54’F) or 18’C (65’F) for countertop applications.

• Do not hand-mix the ADHL-HEMP system, mechanical-mix only.
• Maximum relative humidity during application and cure is 85%.
• Do not apply to porous surfaces where moisture vapour transmission will occur during application.
• Protect from dampness, condensation and water contact during the initial 24-48 hour cure period.
• Do not apply over damp surfaces unless using the waterborne epoxy primer.
• Do not use with other standard epoxy primers as it may cause discolouration.
• May slightly discolour upon direct exposure to sunlight.
• It is not recommended for areas subjected to steam cleaning, harsh chemicals, heavy impact or high heat.
• Do not apply the topcoat less than 8 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, warm up and smoke.

• It is not recommended for severely damaged floors with excessive repair; do not use dark or coloured repair material (gel) with clear epoxy topcoat.

• Do not use over the existing floor without testing both the inter-coat adhesion as well as the adhesion of the existing floor to the concrete.

• Do not thin the topcoat with a solvent of thinner. The prime coat can be extended in certain situations with SolvantTM up to 1⁄2 litre per 11 L unit (add the solvent after thoroughly mixing part A & B together). Ensure that the solvent has exited before

applying the second coat and third coat.

COVERAGE

12 mil dry film thickness:
Prime Coat: (4 mils): 10 m2/litre (400 ft2/U.S. gallon) Second Coat (8 mils): 5 m2/litre (200 ft2/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 prod- ucts 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 Adhesives lab Products, its distributors or dealers."