

Extended Open Time 100% Solids Epoxy

E-100 PLUS is a long pot life 100% solids cyclo-aliphatic epoxy with extended working time on the floor and superior self-leveling. E-100 PLUS is a water-clear finish that will resist ambering over time and is a great system for use with Metallic VR pigments.

Typical Uses:

Versatile Epoxy that can be used in Industrial, Commercial, and Residential applications such as:

- **Education and Stadium Facilities**
- **Warehouse and Office Space**
- **Manufacturing and Workshops**
- **Retail Flooring and Restaurants**
- **Healthcare and Hospitals**

Product Advantages:

- **Versatile Self-Leveling Formula**
- **45 Minute Pot Life at 70° F Ambient Temperature**
- **Slower Set Times to Allow for Enhanced Metallics Movement**
- **Water Clear with High Reflectivity**
- **Low Odor and VOC Compliant**

Coverage:

Typical coverages are as follows for E-100 PLUS:

- 160 sq ft per gallon for 10 mil DFT (Primer)
- 100 sq ft per gallon for 16 mils DFT (Build Coat)
- 40-80 sq ft per gallon for 20-40 mils DFT (Metallic)

Directions for Use:

Moisture Testing:

E-100 PLUS is a 100% solids cross linked resin. Moisture vapor transmission in excess of 3 pounds per 1,000 sf can cause blisters, bubbles and other detrimental effects in a resinous coating. Damage caused by MVT does not indicate a product failure, but a preparation failure. Excessive moisture beyond. Parameters

Solids Content (weight) – 100%
Dry Time, Tack Free – 11 to 13 hours
Dry Time, Foot Traffic – 20 to 24 hours
Dry Time, Heavy Traffic – 2 to 7 days
Recoat Window – 12 to 24 hours
Pot Life @ 72° F – 25 Minutes

Application Temperature:
Substrate - 50° to 80° F

VOC – less than 50 g/L

Packaging:

3-Gallon Kits

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listed, from below and in the atmosphere, must both be considered before product is placed.

Plastic Sheet Test: (ASTM-D-4263) A preliminary test to see if moisture vapor is present can be done with the simple application of a plastic sheet, 24"x 24" being taped to the surface on all four sides. If after 48 hours moisture is present under the plastic a more precise test must be performed to measure the current MVER. The Plastic Sheet test should not be used as a rule that there will not be moisture, but it does give you an indication to perform more accurate testing.

Calcium Chloride Test: Perform a calcium chloride test in accordance with ASTM-F1869 Standard, with surface temperature between 65 - 75°F and 40 - 60% atmospheric relative humidity for 48 hours proceeding, and during the test. Follow the instructions listed by the test manufacturer. ASTM F1869 calls for three tests for the first 1,000 sq ft and one additional test for each 1,000 sq ft after that.

RH TESTING: ASTM F-2170 is the standard for testing relative humidity (RH) in concrete floor slabs. To measure the RH conditions deep in a slab of concrete it is necessary to have a thermo-hygrometer with an in-situ probe. The hygrometer is used to calculate RH reading from a probe inserted into holes prepared in the concrete prior to the test. Follow the test manufacturer's instructions for use. The ASTM F-2170 standard calls for at least three tests in the first 1,000 sq. ft. of concrete then one additional test per each 1,000 additional sq. ft.

Substrate Preparation:

SOUND: Concrete that is failing due to poor placement or extensive environmental abuse should be replaced, not repaired. Cracks and joints in concrete should always be treated as moving, with the possibility they will continue moving after the coating is placed. Expansion joints must always be honored since they allow movement in the slab. Holes and divots in the surface should be filled with a suitable material. Semi-rigid joint fillers may be applied in control joints prior to application of the coating, but if excessive movement occurs, a crack will form in the surface of the coating along the joint. Flexible joint sealants should only be applied after the coating is completed and cured. Expectations should be set with the client prior to commencement of the project so they understand that the coating, when bonded properly, will move as the concrete substrate does.

CURED: All concrete must be sufficiently cured to allow for proper hydration. The recommended cure time is 28 days, depending on temperature and humidity.

CLEAN: Surfaces to be coated should be free of contaminants and readily accept water. All potential contaminants on the surface must be removed, including but are not limited to: dust, dirt, oil, grease, paints, glues, sealer, curing agents, releases, efflorescence, chemical contaminants, rust, or algae. Even if grinding is the preferred method it is critical to clean the surface first to keep from pushing contaminants into the pores of the concrete during the grinding process.

PROFILED: Concrete must be profiled to a CSP-2 or CSP-3 for proper bonding. Acid etching is not an acceptable option for smooth or power troweled surface. A water drop test should be performed to make sure water quickly penetrates the surface and darkens it. If water sits on the surface for longer than 15 seconds the concrete is not porous and must be mechanically profiled by shot blasting or diamond grinding. The millage being applied should be considered when choosing the coarseness of the diamond. Surface must be completely cleaned after the mechanical preparation process.

ENVIRONMENTAL CONDITIONS: The substrate temperature during application and curing must be within the limits listed above. Ambient temperature should not be used to judge application temperature. Use of a laser

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temperature gauge is necessary to find the substrate temperature. If product is applied outside of these temperature parameters, the product may not cure properly and will not meet specifications in hardness or chemical resistance.

Mixing Instructions:

If less than full kits will be mixed, each component should be mixed thoroughly with individual tools. Using the same tool to mix part A and Part B will cause contamination and ruin the material being saved for future use. E-100 Plus is to be mixed at a ratio of 2 parts A to 1 part B. In clean mixing containers pour the correct ratio in and mechanically mix for 3 minutes using a jiffy-style mixer. **DO NOT USE A STIR STICK!** The amount of material mixed should only be what can be utilized within the listed pot life of the product. If mixing full 3-gallon kits, the Part A pail may be used as the mixing container.

Application Instructions:

Do not leave mixed material in the mixing container. Mixed product should be poured onto the floor in ribbons then spread and backrolled. A flat or notched squeegee is the most efficient method to quickly get the material across the floor. Do not over-work the product.

RECOAT: Recoat time listed above is directly affected by the ambient surface temperature. Apply additional coatings as early in the recoat window as possible for the best results. Even within the recoat window it is recommended to abrade and clean the existing coat. If the recoat window has passed, it is critical to thoroughly abrade the surface with 80 to 120 grit sanding screens. Thoroughly clean the existing coating before abrading to remove potential contaminants.

Clean Up:

MEK or Xylene

Maintenance:

Use walk-off mats at entrances to keep the floor free of sand and abrasives to minimize scratching. Apply protective felt pads to furniture and fixtures prior to placing on the coating. Use a pH-balanced cleaner to remove light soils. A dilution of ammonia or vinegar and water will clean most contaminants off the surface. Spills should be cleaned promptly to prevent long term staining. Do not use citric-based cleaners.

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Cured Physical Properties:

Compressive Strength – ASTM D695 – 12,200 psi
Tensile Strength – ASTM D638 – 7,300 psi
Flexural Strength – ASTM D790 – 7,700 psi
Adhesion ASTM D-4541 -- >400 psi, concrete fail
Hardness, Shore D – ASTM D2240 – 80
Elongation, percent – ASTM D638 – 6
Abrasion Resistance, 1000 gm load 1000 cycles – ASTM D4060 – 105 mg loss
Gloss, 60 Degree – ASTM D523-14 – 90 deg. +
Coefficient of Friction – ASTM D2047 – 0.70

Chemical Resistance Chart:

<p>E = Excellent F = Fair G = Good NR = Not Recommended</p>	<p>24 Hour Exposure:</p> <p>Acetic Acid (10%) – E Ammonia (28%) – E Brake Fluid – G Ethanol (100%) – G Gasoline – F Hydraulic Fluid – F Hydrochloric Acid (10%) – E Hydrochloric Acid (50%) – G MEK – NR Motor Oil – E Mustard – E Power Steering Fluid – G Skydrol – G Sulfuric Acid (10%) – F Sulfuric Acid (50%) – NR Urine – E Vegetable Oil – E Water – E Wine – E Xylene – G</p>
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Slip Resistance Disclaimer:

Notice: The Occupational Safety and Health Administration (OSHA) and the American Disabilities Act (ADA) have set enforceable standards for slip-fall protection on walking surfaces. The ADA standards are the more stringent and require a minimum coefficient of friction (CoF) on level walking surfaces of 0.6 and on ramped walking surfaces of 0.8. The system applicator / end user assumes all responsibility to provide a flooring system that meets all current safety standards. Neither Durável nor its selling agents will be responsible for any injury that may be incurred in a slip-fall accident. Furthermore, Durável recommends the use of slip-resistant aggregate in all coatings or floor systems that could possibly be exposed to wet conditions or become

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contaminated with oils, grease, or other lubricants. Refer to the technical data sheet on acrylic wax floor finishes that meet requirements for ASTM D2047.

Storage:

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from heat. Keep from freezing. Store product above 50 degrees F/10 degrees C and below 95 degrees F/35 degrees C.

Disposal:

Disposal of product and packaging should be in accordance with applicable regional, national and local laws and regulations.

Shelf Life:

Up to one year from original manufacture date when stored in its original, unopened container at room temperature.

Limitations:

This product is not intended for public use and is intended for use by qualified contractors and installers with proper experience and training in the use of these products, and that have read the complete safety data sheet. Apply product only when substrate and ambient temperatures are within the accepted range and to substrates that are a minimum of five degrees above dew point and will remain so during product cure. During application and cure protect product from all contaminants and traffic.

Warranty:

Durável warrants our products to be of uniform quality, free from defects within manufacturing tolerances, and to conform to published specifications as of the date of sale. Durável has no control over the use of the product and therefore no warranty, expressed or implied, is made or can be made as to the application of the product or the results of use. The manufacturer's obligations shall be limited to refunding the purchase price or providing replacement product for material proven to be defective. Ninety days after delivery of product all warranty and other duties with respect to the quality of the product delivered shall be presumed to have been conclusively satisfied, all liability therefore terminates, and no action for breach of any stated or implied duties may thereafter be commenced. The end user is responsible for determining the product's suitability and assumes all risks and liabilities. Under no circumstances will Durável be subject to or held liable for a consequential damage to anyone in excess of the purchase price of the product.

Disclaimer:

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. The information given is designed only as a guidance for safe handling, use,

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processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Durável assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, Durável assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety precautions are followed.

Safety Instructions:

Use with adequate ventilation to ensure exposure levels are maintained below the limits provided on the product Safety Data Sheet. Use local exhaust ventilation to control airborne vapor. Ensure eyewash/safety shower stations are available near areas where this product is used. As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors/mists generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

First Aid:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN: (or hair) Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. If symptoms persist, call a physician.

IF SWALLOWED: If product is swallowed, call physician or poison control center for most current information. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or who cannot swallow. Seek medical advice. Take a copy of the label and/or SDS with the victim to the health professional.



Always Review SDS & Technical Data Prior to Use

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