

PRODUCT DESCRIPTION

One Stop Epoxy 100% Solids Epoxy is a premium quality, self leveling, two component high gloss floor coating designed for durable seamless flooring systems. It is suitable for commercial and industrial floors, garages, showrooms, warehouses, shops, and decorative flooring systems. At 75°F, typical working time on the floor is approximately 45 minutes. Higher temperatures shorten working time.

CRITICAL APPLICATION RULE

Full 3 gallon kits must be mixed with a cage or box mixer at approximately 300 to 450 RPM. After Part A and Part B are mixed, pour the material onto the floor promptly. Leaving mixed epoxy in mass inside the bucket traps reaction heat, rapidly shortens working time, and can cause the material to overheat, harden, and ruin the batch.

TYPICAL USES

- Solid color epoxy flooring systems
- Pigmented receiver coats for vinyl flake floors
- Commercial and industrial floor coatings
- Garage, showroom, warehouse, and shop floors
- Base coat under Metallic Dream Epoxy systems
- Primer coat where substrate conditions allow

ADVANTAGES

- 100% solids epoxy
- 2A : 1B mix ratio by volume
- Self leveling high build coating
- 45 minute working time at 75°F
- High compressive strength and concrete adhesion
- Low VOC, less than 50 g/L

SURFACE PREPARATION

Mechanically grind concrete to an ICRI concrete surface profile of CSP 2 to 3. The concrete must be clean, structurally sound, and free of oil, wax, curing compounds, loose coating, dust, and other bond breaking contaminants. Vacuum the prepared floor thoroughly. Porous concrete may require a primer to seal the surface and reduce outgassing or bubbling. Elevated concrete moisture may require a moisture vapor barrier before coating.

TECHNICAL DATA

Mix ratio by volume	2A : 1B
Solids content	100%
Working time at 75°F	Approx. 45 min
Mixed viscosity, Brookfield	500 - 750 cps
VOC	< 50 g/L
Shore D hardness, ASTM D2240	89 - 91
Compressive strength, ASTM D695	16,500 psi
Adhesion to concrete, ASTM D4541	600 psi
Tensile strength, ASTM D638	3,850 psi
Flexural modulus, ASTM D790	4,700 psi
Koenig hardness, ASTM D4366	145
Taber abrasion, ASTM D4060	22 mg lost
Coefficient of friction, ASTM D2047	< 0.60

TYPICAL CURE TIMES

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Dry to touch at 75°F	8 - 12 hr
Recoat window	8 - 24 hr
Foot traffic	24 hr
Vehicle traffic	72 hr
Full cure	7 days

Cure and working times vary with material temperature, slab temperature, air temperature, batch size, film thickness, and jobsite conditions.

COVERAGE

TYPICAL COVERAGE	
Primer on porous concrete	150 - 200 sq ft/gal
Commercial and industrial coat	100 - 135 sq ft/gal
Pigmented receiver coat	133 - 150 sq ft/gal
Metallic floor base coat	135 - 150 sq ft/gal

Coverage is approximate and will vary with concrete porosity, surface profile, application method, and film thickness.

EXTERIOR APPLICATIONS

Do not use 100% Solids Epoxy as an exposed exterior finish coat. Aromatic epoxy will amber with UV exposure. In exterior broadcast systems, the epoxy must be completely buried under the broadcast media and protected with a suitable UV resistant topcoat.

MIXING

Proper proportioning and mixing are critical. Do not hand mix a full kit. Full 3 gallon kits must be mixed with a cage or box style mechanical mixer at approximately 300–450 RPM. A paddle mixer may be used for properly proportioned partial batches but is not recommended for a full 3 gallon kit. Partial batches may be mixed only when the 2A : 1B ratio can be measured accurately.

1. Add the required pigment to Part A only and blend thoroughly for approximately 1 minute before adding Part B.
2. Pour Part B directly into the center of the Part A bucket. Avoid leaving unmixed Part B on the bucket sidewall.
3. Mix for 2 minutes when material temperature is above 75°F, and 3 minutes when material temperature is below 75°F.

MIXING WARNING

Proper proportioning and complete mixing are critical. Unmixed resin or activator on the side or bottom of the bucket can create soft spots or uncured areas that will not harden correctly.

APPLICATION

Immediately after mixing, pour the material onto the floor in approximately 12 inch ribbons while wearing spiked shoes. Spread with a 1/8 inch or 3/16 inch notched squeegee, then roll and backroll with a lint free 3/16 inch epoxy roller to produce even coverage. Do not leave the mixed material sitting in the bucket while working the floor.

RECOAT AND TOPCOAT

The normal chemical recoat window is 8 to 24 hours. Sanding between coats is recommended as a best practice. If the recoat window is exceeded, mechanically abrade the entire surface until it is uniformly dull before applying the next coat. Remove all sanding dust and wipe the surface with denatured alcohol or acetone before recoating. Approved One Stop Epoxy topcoats include Poly Gloss 85 and One Stop Epoxy Urethane WB.

CONCRETE MOISTURE AND PRIMING

Porous concrete may require a primer to seal pores and reduce bubbling or outgassing. If concrete moisture testing indicates elevated vapor transmission, install an appropriate One Stop Epoxy moisture vapor barrier before the 100% Solids Epoxy system. Substrate condition and moisture testing should be evaluated before coating.

APPLICATION SUMMARY

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Mix ratio	2A : 1B
Full kit mixer	Cage / box mixer
Mixer speed	300 - 450 RPM
Mix above 75°F	2 min
Mix below 75°F	3 min
Working time at 75°F	Approx. 45 min
Notched squeegee	1/8 or 3/16 in
Roller	3/16 in lint free
Recoat window	8 - 24 hr
Foot traffic	48 hr
Vehicle traffic	72 hr
Full cure	7 days

STORAGE AND SHELF LIFE

Store in a clean, dry area in tightly closed original containers. Do not freeze. At approximately 70°F, shelf life is 2 years for Part A and 2 years for Part B when stored properly in unopened containers.

HANDLING AND SAFETY

Use with adequate ventilation. Avoid contact with skin and eyes. Wear protective gloves and appropriate eye protection. Read and understand the Safety Data Sheet before use.

CLEAN UP AND DISPOSAL

Clean uncured material from tools and equipment with denatured alcohol, xylene, or acetone where permitted. Dispose of product, contaminated material, and containers in accordance with applicable federal, state, and local requirements.

REGULATORY

VOC is less than 50 grams per liter. The product is listed as meeting applicable VOC categories in the United States and Canada and as contributing to LEED requirements. Verify project specific regulatory requirements before use.

LIMITATIONS

- Higher temperatures shorten working time and cure time.
- Do not use as an exposed exterior finish coat.
- Porous concrete may require primer to control outgassing.
- Elevated concrete moisture may require a moisture vapor barrier.
- Chemical resistance varies with concentration, temperature, and exposure duration.

CHEMICAL RESISTANCE - ASTM D1308

Chemical resistance varies with concentration, temperature, exposure duration, and cleaning practices. The table below provides general resistance guidance for One Stop Epoxy 100% Solids Epoxy.

Chemical	Result	Chemical	Result
Acetic Acid	Y	Methanol	N
Acetone	N	Methyl Chloride	N
Ammonia 30%	Y	Mineral Spirits	Stain
Antifreeze	Y	Motor Oil	Y
Animal Urine	Y	Mustard	Stain
Brake Fluid	Y	Nitric Acid	N
Chlorine	Y	Orange Juice	Y
Chromic Acid 10%	Y	Phosphoric Acid	Y
Gasoline	Y	Silver Nitrate	Y
Hydraulic Fluid	N	Skydrol	Stain / N
Hydrochloric Acid 35%	N	Sodium Hydroxide (Caustic)	Y
Hydrofluoric Acid	N	Sodium Hypochlorite (Bleach)	Y
Hydrogen Peroxide	Stain	Sulfuric Acid 10% (Battery Acid)	Y
Methyl Ethyl Ketone	N	Windshield Wiper Fluid	Y

Legend: Y = resistant. N = not resistant. Stain = visible staining may occur.

WARRANTY AND LIMITATION OF LIABILITY

One Stop Epoxy warrants the material only if it is proven defective. Labor is not included. In no event shall One Stop Epoxy be liable for direct, indirect, incidental, consequential, or punitive damages arising from the use or inability to use the product or the information provided. Total liability is limited to the amount paid for the defective product or, at One Stop Epoxy's discretion, replacement of the defective product. Product selection, substrate condition, surface preparation, mixing, application, environmental conditions, and use are the responsibility of the purchaser and installer. No representative is authorized to make additional warranties or assumptions of liability on behalf of One Stop Epoxy.