EPOXY HUB

Product Data Sheet

EMP300-PDS-040323

Extended Working Time 100% Solids Multipurpose Epoxy

DESCRIPTION: EH Epoxy MPE 100 is a 2-component, 100% Solids Multipurpose Epoxy with an extended working time on the floor during application. Use for a wide range of industrial, commercial and residential floor coating applications, such as but not limited to, primer, solid color, vinyl chip, shop floor or color quartz broadcast systems, epoxy mortars *(EH Epoxy HD-100 or EH Epoxy HDQ-100 system*)*, patching and more.

RECOMMENDED USES:

- 3 coat / Thin-Mil coating systems
- Matrix for broadcast systems
  - Vinyl Chip
  - Quartz
  - Shop Floor
- Matrix for EH Epoxy HD-100 Epoxy Mortar system
- Patching cracks, gouges, chips, etc. *(when mixed with Silica Fume and/or sand)*

HIGHLIGHTS:

- Versatile, Multipurpose Epoxy floor coating – Use for priming, body coats, patching, mortars, vertical & horizontal applications in Industrial, Institutional, Pharmaceutical, Food & Beverage, Commercial, or Residential applications
- Extended Working Time vs. traditional regular cure multipurpose epoxy products
- Durable – Ideal for industrial manufacturing traffic environments
- Low VOC

STORAGE:

Indoors between 55°F (12.7°C) to 90°F (32.2°C)

SUBSTRATE SURFACE TEMPERATURE:

60°F (15.5°C) to 86°F (30.0°C) with <80% Ambient Humidity

SHELF LIFE:

1 Year in original, unopened containers; use with 30 days after opening

AVAILABLE KIT SIZES:

SCS-EMPE 100-3Kit	3 gallon kit
SCS-EMPE 100-15Kit	15 gallon kit
*SCS-EMPE 100-drum	*150 gallon kit*
*SCS-EMPE 100-tote	*750 gallon kit*

**Special order – Call for pricing*

COLORS:

Clear (Slightly Yellow); accepts EH ISC Industrial Solid Color Packs – Available Separately

CURE TIMES (@ 50% Relative Humidity):

Temperature (@ 50% Humidity)	60°F	72°F	85°F
Pot-life	40 min.	20 to 30 min.	12 to 14 min.
Working Time	60 min.	35 to 40 min.	15 to 20 min.
Tack Free	18 to 22 hrs	8 to 10 hrs	5½ to 6½ hrs
Recoat Window	24 to 36 hrs	15 to 24 hrs	8 to 24 hrs
Light Foot Traffic	48 hrs	24 hrs	20 hrs
Heavy Traffic (i.e. Forklifts, pallet jacks)	84 to 96 hrs	60 to 72 hrs	36 to 48 hrs
Full Chemical Resistance	14 days	14 days	14 days

CURED COATING PROPERTIES (DRY FILM):

Property	Test Method	Results
Abrasion Resistance, *mg/loss* *Taber Abraser	ASTM D4060	113 mg
Adhesion to Concrete	ASTM D4541	Concrete Fails
Adhesion to Steel - Pull Strength, psi (MPa)	ASTM D4541	3,127 psi (21.56 MPa)
Shore D Hardness	ASTM D2240	75 to 80
Hardness (Pencil)	ASTM D3362	6H
VOC's (clear)	ASTM D3960	3 g/L
Gloss 60°	ASTM 1455	>95°
Viscosity – Mixed (clear)	ASTM D4878	390 to 430 cP
Volume Mix Ratio (clear)		2 Parts A : 1 Part B

**CS-17 Taber Abrasion Wheel, 1,000 gram load, 1,000 revolutions Results are based on conditions at 77°F (25°C), 50% relative humidity.*

APPROXIMATE COVERAGE (NEAT):

Coverage varies due to application thickness, floor profile and absorbency of concrete.

A one gallon mixture of EH Epoxy MPE 100 will cover:

Coverage Equation: 1604 ÷ milage = Dry Film Thickness

Mil Thickness	Coverage per mixed gallon
5 mils	321 sq.ft.
7 mils	229 sq.ft.
10 mils	160 sq.ft.
12 mils	133 sq.ft.
15 mils	106 sq.ft.
20 mils	80 sq.ft.
25 mils	64 sq.ft.
30 mils	53 sq.ft.
35 mils	45 sq.ft.

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Typical Chemical & Stain Resistance

ASTM D 1308 Test Method 3.1.1 3 Covered Spot Test of a 6 mil pigmented film after a 7 day cure prior to testing. Results are based on 24 hours covered exposure

***E** - Excellent; **G** - Good (slight sign of exposure/stains, coating recovers);*
***D** – Permanent Discoloration **NR** - Not Recommended (Permanent Damage)*

ACIDS	24 hour Exposure
Acetic Acid 25% (Vinegar)	G
Citric Acid 10%	E
Lactic Acid 88% (Milk)	NR
Phosphoric Acid 85%	G
Sulfuric Acid 25% (Battery Acid)	E
Sulfuric Acid 98%	NR
Hydrochloric Acid 32% (Muriatic)	E
Nitric Acid 50%	NR
BASES	
Ammonium Hydroxide 10%	E
Sodium Chloride 20%	E
Sodium Hydroxide 50%	E
Sodium Hypochlorite (Bleach)	G
Trisodium Phosphate 10%	E
ALCOHOLS	
Ethylene Glycol (Antifreeze)	E
Hand Sanitizer	G
Isopropyl Alcohol 91%	G
Methanol	G
SOLVENTS	
Acetone	G
d-Limonene	E
MEK	G
Methylene Chloride	D
Mineral Spirits	E
PGMEA	G
HYDROCARBONS	
Brake Fluid	NR
Hydraulic Fluid	E
Kerosene	E
Motor Oil (SAE 10W40)	E
Transmission Fluid	E
Skydrol® – LD-4	NR
MISCELLANEOUS	
Coffee	E
Coke	E
Dish Detergent (Dawn®)	E
Hydrogen Peroxide 3%	G
Ketchup	E
Monster Energy® Drink	E
Mustard	D
Povidone-iodine (BETADINE®)	D
Tide® 1%	G
Windex® (Ammonia Based)	D
Wine – Red	D

Coke® is a registered trademark of Coca-Cola. Monster Energy® is a registered trademark of Monster Energy Co. Skydrol® is a registered trademark of Eastman Chemical. Dawn® & Tide® are registered trademarks of Proctor & Gamble. BETADINE® is a registered trademark of Avrio L.P. Windex® is a registered trademark of S.C. Johnson & Son, Inc.

TEMPERATURE & HUMIDITY: Substrate temperature & materials must be maintained between 60°F (15.5°C) to 86°F (30.0°C) with less than 80% Humidity for 48 hours prior to & 24 hours after installation. Do not install coatings when the Dew point is within 5° of the temperature.

LIMITATIONS:

- *Not U.V. Stable* – All epoxy will amber over time & will be more noticeable with lighter colors, both solid pigmented or Metallic & Luster, as well as when applied clear over decorative broadcast or color quartz
- *Wood substrates* – Must be sound, solid, free of contaminants such as oil, wax, sealers, paint, etc.as well as insect damage or rot & must meet requirements for subfloor deflection *(i.e. 300 lbs. deflection test – See page 4 under "Preparing Wooden Substrates" section for more details)*

INSPECT THE SUBSTRATE: Ensure the concrete is structurally sound & solid as well as free of any contaminants that may act as a bond breaker, such as oil, paint, densifier/sealers, curing compounds, wax, silicone, etc. Do NOT install over water damaged wooden subfloors.

CHECK FOR MOISTURE: Testing concrete moisture content, alkalinity & vapor transmission levels is highly recommended. Moisture Content (ASTM F2659) should be below 4% MC & surface alkalinity needs to be 9 to 12 pH at the time of testing, otherwise, both the Moisture Vapor Emission Rate (ASTM F1869) & Relative Humidity (ASTM F2170) testing will need to occur to determine the proper next steps. Using only one test method will not provide all the necessary information & may not indicate other potential risks such as contaminates, etc. that may pose a risk for delamination, chemical attack, etc. which are not necessarily caused by moisture vapor emissions nor high alkalinity.

EH Epoxy MAC100 or EH Epoxy MAC125, in conjunction with proper testing & mechanical preparation, may be an appropriate option to reduce the moisture vapor emission rate to a level within the tolerance of subsequent coatings & traditional floor covering needs. Please contact Epoxy Hub to discuss testing results & options.

Follow the testing manufacturer's instructions precisely or visit www.astm.org, see ASTM F2659, F1869 or F2170, to purchase the test methods. Testing MUST occur within an acclimated, interior environment for the results to be valid & conclusive.

Epoxy Hub is strictly a product manufacturer & does NOT offer any testing or analysis but may be able to offer guidance to an appropriate testing lab or third-party inspector. When in doubt, hire a qualified third-party testing firm with appropriate certifications & credentials.

CONTAMINATION OF SUBSTRATE: Concrete is porous & can become contaminated with oils, chemical from spills, etc. which act as a bond breaker. Determine if a potential bond breaker exists & a proper course of remediation. Core sample Petrographic Analysis is the best method for testing of concrete for contaminate type & depth as well as for documenting & determining if other risks exist prior to proceeding with quoting & application of a flooring system. It is the contractors' responsibility to determine the substrate suitability plus the course of action for remediation.

Delamination and/or breakdown due to the following causes are examples of substrate contamination:

- AAR (Alkaline Aggregate Reaction)
  - ACR (Alkali-Carbonate Reaction)
  - ASR (Alkali-Silica Reaction)
- Near Surface ASR (may occur in certain environments which have been topically treated with Sodium Silicates or Potassium Metasilicates)
- Substrate contamination (i.e. Oils, Solvents, PERT, PCB's, Silicone, etc.)

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CHEMICAL CONTAMINATION – Chemical contamination should be determined and may require additional testing. Once the type of contaminant is determined, contact Epoxy Hub for recommendations while following local regulations regarding contaminant and disposal.

OIL CONTAMINATION – EH Oil Clean may be used to remove oils, such as petroleum, synthetic, or food oils, from concrete & other mineral based substrates surfaces prior to mechanical preparation. Wood substrates contaminated with oil may require removal & replacement of the oil contaminated area with new wood *(i.e. APA rated Exterior or Marine Grade)* to ensure proper adhesion.

Once the oil & grease have been removed from the surface & thoroughly rinsed with clean, potable water, mechanically prepare the concrete as stated in the "Mechanical Preparation of Concrete" sub-section under "Substrate Preparation" later in this page.

If oil continues to "weep" out of the concrete after mechanical preparation, clean again with EH Oil Clean then encapsulate the oil/grease remaining in the concrete while the substrate remains "damp dry" with water but ensure no standing water puddles exist prior to application of 10 to 12 mils of EH Epoxy MAC125 primer. Allow to cure for a minimum of 5 hours or overnight then use a sanding screen under a green floor buffing pad under a low-speed floor machine to remove any contaminates that may have floated to the surface of the epoxy before it hard set as well as scuff the surface dull. Vacuum off the sanding dust then tack rag with Acetone on a microfiber mop repeating with a fresh, clean microfiber until no dust residue can be seen on the microfiber *(DO NOT USE Denatured Alcohol or Xylene for this application).*

SILICATE CONTAMINATION – Substrates which may have been previously treated with silicates (Potassium or Sodium Silicates) such as polished or burnished concrete as well as certain surface hardeners such as "Ashford Formula" or similar may skew moisture testing results.

A good indication of potential silicate contamination may be seen during traditional moisture testing with abnormally high pH (between 11.5 to 14 pH) but relatively low CaCl reading (less than 6 lbs. reading) with RH readings above 85%.

Testing pH levels with a pH pencil or Litmus paper along with distilled water is a very inexpensive, easy way of identifying a potential risk, in conjunction with Moisture Vapor testing methods to determine whether more in-depth testing should occur. Petrographic Analysis of concrete core samples may offer the most in-depth analysis of the situation should this be deemed necessary.

Concrete contaminated with silicate densifiers / hardeners of these types must be mechanically prepared followed by cleaning EH Green Clean Pro utilizing an auto-scrubber with soft bristle nylon brush heads and through clean, potable water rinsing at least 24 hours prior to moisture vapor & pH testing in order to obtain accurate readings, otherwise, all testing & subsequent moisture vapor emission warranties are null & void.

NOTE:

- *DO NOT USE* MURIATIC/HYDROCLORIC ACID TO PREPARE CONCRETE AS CHLORIDE CONTAMINATION MAY OCCUR
- When etching, ensure all Green Clean Pro has been thoroughly removed with potable water with no remaining soapy residue or cement slurry
- *DO NOT USE* Green Clean Pro on *"Green"* concrete *(less than 30 days old), Hard Trowel Finished* concrete or *previously sealed/coated/painted concrete* to including any type of curing compound

SUBSTRATE PREPARATION:

NOTE: *DO NOT USE* MURIATIC / HYDROCLORIC ACID TO PREPARE CONCRETE AS CHLORIDE CONTAMINATION CAN OCCUR.

TEMPORARY HEAT: *During application in environments using temporary heat, make sure to exhaust emissions & toxic fumes from temporary heaters to the exterior of the building to prevent health hazards & damage to work. Moisture vapor is emitted by fueled temporary heaters which can cause an amine blush with epoxy products. Many temporary heating methods emit unburned petroleum into the air which act as a bond breaker once it falls onto the surface of the substrate*

- Precautions must be taken when using LP, gasoline, diesel, etc. fueled temporary heat
- Always shut off temporary heat at least 2 to 3 hours prior to application to reduce risk of an amine blush
- Always clean the mechanically prepared surface with EH Oil Clean or TSP using an auto-scrubber followed by a thorough clean water rinse when temporary heat has been in use
- Fisheyes are a result of surface contamination or an amine blush

MECHANICAL PREPARATION of CONCRETE: Achieve a CSP 2 to 5 *(Concrete Surface Profile in accordance with ICRI Guideline 310.2R2013, as published by the International Concrete Repair Institute)* on concrete to yield an absorbent substrate. Extent of concrete surface profile (CSP) necessary will be determined based on the total thickness of the floor coating system being applied while considering the type and extent of traffic anticipated. Please refer to the individual system application guide or contact Epoxy Hub for recommendations. As a rule thumb, thicker coating systems require a more extensive surface profile / texture than a thin system.

If a densifier or dissipative curing compound is believed to have been present, see "Silicate Contamination" section on the left column of this page for treatment using EH Green Clean Pro after mechanical preparation.

CRACKS, CHIPS & GOUGES: A variety of different, compatible coating materials may be used to repair chips, gouges, etc., to include but not limited to, EH SKM, EH Epoxy GEL150; EH Epoxy GEL-150/FC, EH Poly-JF, EH Poly-JF/FC EH Epoxy U100 / EH Epoxy FC125 mixed with Silica Fume; EH Poly PCF-45 or similar *(Click on product name for detailed instructions).* Ensure resinous patch is hard enough to walk on without imprinting or damage before proceeding with next steps.

Resinous repair products are preferred, however, if a cementitious repair compound is used, ensure the following are met*:*

- *non-water soluble / recommended for exterior use*
- >5,000 psi
- Reads below 4% MC *(ASTM 2659)* when tested using a concrete moisture impedance meter prior to applying coating
- Mechanical prepare the substrate beneath of the cement-based product to the appropriate CSP necessary for the coating system as well as the surface of the cement product prior to coating
- Portland or CSA cement-based only
  - *rated for direct traffic*
  - *Follow cement manufacturers recommended cure time prior to moisture-cured adhesives for estimated cured time prior to mechanical preparation prior to coating*
- *Not recommended over Gypsum-based cementitious products, to include synthetic gypsum*

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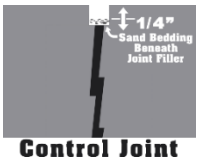
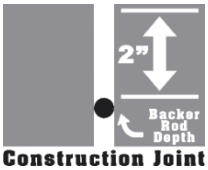
JOINTS: Honor expansion joints at the finish floor elevation. Follow ACI 224.3R-95: Joints in Concrete Construction guidelines for proper filling of construction and control joints. ACI recommends allowing a concrete slab to cure for a minimum of 60 to 90 days or longer to allowing the slab to shrink and acclimate to the intended joint width thus reducing the risk of joint wall separation from the joint filler. Cooler climate applications such as freezer & coolers must be brought up to & held at a minimum of 45°F substrate temperature for no less than 10 days prior to as well as 7 to 10 days after filling with an appropriate semi-rigid joint filler, such as EH Poly JF or EH Poly JF/FC, ideally longer if possible.

Always route out joints with an appropriate width diamond cutting blade attached to a vacuumized and dust controlled joint saw to flush out debris and freshly clean the side walls of the joint. Ensure that all loose edges and broken pieces of the concrete are removed and repaired prior to filling the joint with EH Poly JF or EH Poly JF/FC. Should joint side walls require extensive repairs, cut out the bad section of concrete back to a sound, solid area then fill with an appropriate mortar for the depth and application.



Control Joint



Construction Joint

NOTE - Plastic Media, Soda Blasting, etc. do not achieve enough of a profiled surface and will require additional chemical etching to properly adhere the coating to the metal.

Metal surfaces should be mechanically prepared and rust scale should be removed with a scraper prior to wire brushing or sand blasting. Once the scale is removed, the surface must be solvent washed or use an automotive Brake Parts Cleaner for small, isolated rinsing. Once clean, paint the corroded metal surface with an anti-corrosion primer, such as EH DTM primer, then allow to fully dry prior to joint filling or concrete repairs to protect against further corrosion to the metal. To support the joint filler and assist in sag reduction, fill the bottom of the joint with a bond breaker. Sand is recommended, especially for use in shallow joints less than 2" depth. *Only use backer rod if the joint filler is to be applied greater than 2" above the backer rod.*

PREPARING WOODEN SUBSTRATES: Wood substrates must be sound, solid, free of contaminants such as oil, wax, sealers, paint, etc. and without any insect damage or rot. The floor should not deflect under a 300 lbs. load more than the "span" divided by 360 for residential use or by 720 for commercial applications. Examples of maximum deflection below:

- Residential
  - L/360 *(300 lbs. deflection test) or <1/2" (13mm) deflection in 15 ft. (4.6 m)*
- Commercial or subfloors with 19.2" (48.7 cm) o.c. joists & 24" (61 cm) o.c. truss systems
  - L/720 *(300 lbs. deflection test) or <1/4" (6mm) deflection in 15 ft. (4.6 m)*

Wood substrates must be APA rated either exterior grade or marine grade plywood which has been firmly fastened to the joists with no loose boards. Thoroughly sand the entire surface to be coated then vacuum to remove all dust and debris paying close attention to seams, board joints, knot holes, fastener holes, etc. Seal off any holes / penetrations using foam sealants, which may require fire stop foam depending on local building codes. All board joints or other voids which may allow liquid to leak through should be patched or skimcoated with an appropriate resinous based product, such as EH SKM, EH Epoxy GEL-150, EH Epoxy GEL-150/FC, EH Poly-JF, EH Poly-JF/FC or similar.

NON-POROUS SUBSTRATES & EXISTING COATINGS:

Always clean the surface prior to mechanical preparation to ensure potential bond breakers and surface contaminates have been thoroughly removed to avoid spreading the contamination across the floor. Once clean, sound and solid substrates should be checked for compatibility with EH Epoxy MPE 100 and if compatible, begin mechanically abrading the surface to remove any weak areas and to scratch as well as degloss the entire area desired to be coated.

Should verification of proper adhesion be desired over an existing coating, follow ASTM D 4541 using an Elcometer to determine a direct tensile pull-off strength greater than 250 psi (1.7 MPa) to pass the test. It is highly recommended that a 10 foot by 10 foot test area be applied of the entire desired coating system and allowed to cure for no less than 1 month prior to performing an in-situ direct tensile bond test to determine adhesion strength values.

If EH Epoxy MPE 100 is to be used as part of a system, follow the recommended preparation methods for individual system application.

**Key in all termination points using a diamond cutting blade prior to any above preparation method.*

Please refer to ICRI Guideline 310.2R2013 for more in-depth preparation details and recommendations.

NECESSARY TOOLS and EQUIPMENT:

- Plastic Sheeting to cover floor for mix station
- 3-Blade or Bird Cage flat ring bottom style mixing paddle
- Low speed ½" drill (Variable Speed ≤450 rpm)
- Mixing Buckets or Portable Mix Stations
- Premium, Non-Shed 3/8" Nap Paint Roller Covers
- Paint Roller Frame with Extension Pole
- Spiked shoes or Cleats
- Cleaning Solvent (Acetone, Denatured Alcohol, MEK, or Xylene)
- Notched Squeegee, Magic Trowel, Flat Squeegee or Flex Steel Blade Smoother (Application dependent)

NOTE: *Mix station & all application equipment should be ready for immediate use prior to mixing any product due to the epoxy pot-life once mixed. Only mix enough Epoxy MPE 100 to be placed within 20 minutes allowing for proceeding batches to tie into the wet edge for an additional 15 minutes at 72°F. Higher temperatures & humidity will shorten pot-life.*

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PRIMING:
After mechanically preparing the substrate, prime with:

Concrete:
- EH Epoxy FW38 – Coat after 2 to 3 hours at 72°F up to 24 hours
- EH Epoxy U100 – Coat after 4 to 5 hours at 72°F up to 24 hours
- EH Epoxy FC125 – Coat after 2 ½ to 3 hours at 72°F up to 24 hours
- EH Epoxy MPE 100 – Coat after 5 to 6 hours at 72°F up to 24 hours

Oil Stop priming (over concrete only):
- Remove oil with EH Oil Clean then mechanically prepare the substrate to a CSP 2 to 6 prior to installing the 2 coat priming process for EH Epoxy MAC125 – 2 to 3 hour cure at 72°F between coats and before next layer but no more than 24 hours

Highly absorbent substrates (i.e. lightweight concrete, wood, etc.) should be double primed using:
- EH Epoxy FW38 – Recoat when hard set, typically within 2 to 3 hours at 72°F

Filling Grout Joints between existing Tile (Ceramic, Porcelain, Quarry or Stone):
- EH SKM (trowel at feather edge skim coat up to 5") – Apply next layer after 2½ to 3½ hours at 72°F up to 24 hours

Resurfacing over Tile & Grout Joints:
- EH Poly-FLEX (Self Leveling >1/32"/30 mils) – Coat after 4 to 5 hours at 72°F up to 24 hours

Priming existing Tile (Ceramic, Porcelain, Quarry or Stone) after diamond grind:
- EH Epoxy GEL150 (Flat Squeegee or Skimcoat trowel) – Coat after 5 to 6 hours at 72°F
- EH Epoxy GEL150/FC (Flat Squeegee or Skimcoat trowel) – Coat after 2 to 3 hours at 72°F
- EH SKM (Skimcoat & troweling up to 5") – Coat after 2½ to 3½ hours at 72°F
- EH Epoxy U100 (Squeegee then backroll) – Coat after 4 to 5 hours at 72°F
- EH Epoxy FC125 (Squeegee then backroll) – Coat after 2 ½ to 3 hours at 72°F
- EH Epoxy MAC100 (Squeegee then backroll) – Coat after 12 hours at 72°F
- EH Epoxy MAC125 (Squeegee then backroll) – Coat after 2 to 3 hours at 72°F

MIXTURE: Open all Part A's of EH Epoxy MPE 100 then use a low speed drill (≤450 rpm) with a clean mixing paddle to stir. *"Stick" mixing is NOT recommended.*

MIXING FULL 3 GALLON KITS **–** In an empty 5 gallon pail, pour the entire contents of EH Epoxy MPE 100 Part A and EH Epoxy MPE 100 Part B into the pail then mechanically mix for 2 to 3 minutes using a low speed (≤450 rpm) ½" drill with paint mixing paddle attached.

If a solid color is desired, add 1 can of EH ISC to a 3 gallon kit of EH Epoxy MPE 100. Make sure to premix EH ISC Color Packs thoroughly with a paint stir stick to redistribute any pigment settling as well as box colors prior to adding to epoxy.

MIXING BY VOLUME **–** Measure 2 Parts A to 1 Part B by volume using paint measuring cups then combine in a pail. Add optional color at this time. Mix using a ½" low speed drill *(less than ≤450 rpm)* with a paint mixing paddle for 3 minutes. Immediately pour out the mixed EH Epoxy MPE 100 in ribbons onto the floor and continue this process tying into the wet edge with freshly mixed EH Epoxy MPE 100 until complete.

Optional Solid Color Packs – Use 3.5% by Volume of EH ISC Industrial Solid Color Packs for most colors.
Use 7% by volume for Whites, Greens, Safety Red, Orange or Yellows.

Optional Metallic colors – Use 1 jar *(600 grams)* of EH Metallic & Luster per 3 gallon kit or 1.5 grams Metallic & Luster per 1 fluid ounce of EH Epoxy MPE 100. May adjust between 4 to 16 oz. Metallic & Luster per gallon for desired effects.

**See system application guides for more specific application details.*

Application method varies depending on the coating system.

NOTE:
- *DO NOT TURN THE MIXING VESSEL UPSIDE DOWN ON THE SUBSTRATE TO ALLOW THE RESIDUAL PRODUCT TO DRAIN ONTO THE FLOOR TO AVOID THE RISK OF ANY UNMIXED OR NON-THOROUGHLY CATALYZED PRODUCT FROM THE SIDES AND BOTTOM OF THE MIXING VESSEL FROM REACHING THE FINISHED FLOOR.* Best practice, pour contents of mixing vessel into a new container, mechanically stir to ensure thorough blending then transport to the floor for application as described below
- When using EH Epoxy MPE 100 Part A's that had the color packs added on a previous day, always drill blend the Part A's again prior to use.
- It is best practice to "box" color packs, especially if using color packs from multiple batches, to ensure consistent solids colors.

COVERAGE: **See chart on page 1 of this document*

OPTIONAL LAYERS or TOPCOATS: Allow EH Epoxy MPE 100 to thoroughly harden before walking on, sanding or applying additional layers and/or topcoats. **See page 1 for approx. cure time references based on typical application temperatures.*

Sand the cured epoxy using a low-speed floor machine *(<3,000 rpm Orbital / <400 rpm square)* with 100 to 120 grit screens to scuff the surface then thoroughly clean then solvent wipe / tack rag between coats for optimal appearance when a gloss topcoat will be the final layer.

Recommended Topcoats:
- EH Poly-WB (High Performance, Semi-Gloss Waterborne Polyurethane)
- EH MCU-60 (Solvent-based, High Gloss 60% Solids, Moisture Cured Urethane)
- EH Polyaspartic 1000 (Fast Cure, High Gloss, 76% Solids Polyaspartic)
- EH Polyaspartic 2000 (Extended Pot-Life, High Gloss, 76% Solids Polyaspartic)
- EH Polyaspartic 5000 (Reduced Odor, High Gloss, High Build, 87% Solids Polyaspartic)
- EH CRU'86 (Low Odor, High Gloss, 86% Solids Chemical Resistant Urethane)
- EH Hi-Wear 90S (Low Odor, Low Sheen, 90% Solids High Traffic Chemical Resistant Urethane)

SLIP RESISTANCE: Epoxy Hub recommends the use of angular slip-resistant aggregate in all coatings that may be exposed to wet, oily or greasy conditions as well as any condition where increased traction may be necessary. It is the contractor and end users' responsibility to determine the appropriate traction needs and footwear necessary for the conditions

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as well as setting performance parameters prior to beginning the application, testing to determine parameters have been met upon completion to achieve the end users documented safety standards.

Mock-ups are highly recommended as part of the evaluation process to determine the appropriate amount of slip-coefficient necessary for the environment.

MAINTENANCE: ***The coating system must be allowed to cure for no less than one week (7 days) before using any mechanical cleaning equipment on the surface & no less than 24 hours before neutral cleaner or water exposure. This includes auto-scrubbers, swing buffers, sweepers, etc. Only dust & wet mop the first week. If a topcoat of EH Polyaspartic was applied, wait a minimum of 3 days before using mechanical cleaning equipment.***

Regular cleaning, including dust mopping, is crucial to maintain the appearance & to achieve the appropriate longevity of any floor coating system. Cleaning cannot occur too often. Spills should be removed quickly. *Avoid the use of Polypropylene or abrasive bristle* (Tynex®) brushes as these are known to create scratch patterns & lower the sheen of the finish.

Proper maintenance will help to maximize your investment by removing particles that scratch & dull the appearance of a floor coating. The floor should be swept daily & scrubbed once per week or per month depending on the amount & type of soils present. Environments with oils or regulated by health departments will need a stricter cleaning regiment.

DETERGENT: Always use the least aggressive detergent necessary to remove the residue. Typically, coated floors may only need a detergent scrub on a weekly or monthly basis depending on the environment. Daily dust mopping or water only mopping/scrubbing is highly recommended. Environments with exposure to foods, oils, chemicals, ink, etc. should be detergent scrubbed daily, possibly enough after every shift.

Caution: Do not drag or drop heavy objects across any floor, including coatings as scratching, gouging or chipping may occur to the concrete or the coating itself. This includes the tip of the forks on a forklift, nails protruding from a pallet, etc.

Rubber tires are prone to plasticizer migration, especially aviation tires & high-performance car tires. Plasticizer will stain coating & commercial flooring leaving an amber, yellow-like stain that can be permanent. This can be more noticeable where aircraft or vehicles are stationary for longer period of time, more so in non-climate controlled environments such as aircraft hangars with lighter colored floors. To avoid plasticizer staining, use a piece of Plexiglas® or LEXAN® panels, cut a few inches in diameter larger than the tires that will rest on the panels, between the floor & the contact point of the tire when storing vehicles with rubber tires on any floor, including floor coating systems. Citric based degreasers will help to remove plasticizer residues from a coating surface & reduce staining risk if used before a stain sets in.

Avoid spinning tires on the surface of a coated floor. The heat created from the friction of a spinning tire will quickly soften the coating causing permanent damage to the finish.

Should a gouge, chip or scratch occur, touch-up the damaged areas immediately to avoid chemical or water intrusion to the concrete which could create additional damage. A thin layer of clear nail polish to the damaged area will provide some minimal protection until the area can be properly repaired.