Smith's EPOXY UCE 222 — Product Data Sheet

2-Component, 100% Solids, Decorative Epoxy Body Coat

EUCE222-PDS-090925

DESCRIPTION: Smith's Epoxy UCE[222] is a decorative 100% solids epoxy used for the body coat of metallic epoxy or mixed with color Quartz aggregate as a mortar for *Smith's Epoxy HDQ-100*™ decorative epoxy mortar system. This epoxy yields extended healing & flow properties when used as the epoxy body coat for *Smith's Metallic & Luster*™ *system* to deliver optimal mottling aesthetics superior to traditional epoxy products while offering high clarity & an extended flow time on the floor. Conveniently packaged in either a 3 gallon kit with space in the Part A container for mixing all necessary components in the pail or in larger kits.

Smith's Epoxy UCE[222] is sold clear. Accepts *Smith's Epoxy U.V. Absorber additive* *(OPTIONAL - sold separately)* to enhance the durability & to extend the service life of the epoxy film by absorbing UVA radiation thus lessening U.V. light degradation *(i.e. Yellowing, Chalking, Cracking, etc.).*

Metallic body coats can be achieved by adding *Smith's Metallic & Luster* to the Part A prior to mixing with Part B for unique metallic epoxy floors. Smith's Epoxy UCE[222] self-heals for up to 60 minutes at 72°F, making it ideal for Metallic & Luster coatings to achieve optimal mottling & a smooth finish for one-of-a-kind floors.

Solid colors can be achieved with the addition of *Smith's ISC*™ *Industrial Solid Color Packs* *(sold separately)*, allowing the contractor the ability to reduce waste by only pigmenting what is needed for the individual project.

RECOMMENDED USES:

- Residential, Retail & Light Commercial applications
  - Matrix for Smith's Metallic & Luster system body coat
- Matrix for Decorative Color Quartz Epoxy Mortar or Grout Coat for Smith's Epoxy HDQ-100 system

HIGHLIGHTS:

- High Clarity & Color Enhancement
- Great Mottling & Metallic Color Contrast
- Good Pot-Life with Superior Flow & Leveling Characteristics vs. traditional multipurpose 100% solids epoxy floor coatings
- No Torching Necessary to break surface tension with metallic body coats
- Low Odor & Low VOC
  - Complies with VOC regulations for industrial maintenance coatings in SCAQMD

STORAGE:
Indoors between 60°F (15.5°C) to 90°F (32.2°C)

SUBSTRATE SURFACE TEMPERATURE:
60°F (15.5°C) to 86°F (30°C) with less than 80% Humidity

SHELF LIFE:
1 Year in original, unopened containers
**Use soon after opening as air may cause hardener (Part B) to discolor once opened*

AVAILABLE KIT SIZES:

SCS-UCE222-3KIT	3 gallon kit
SCS-UCE222-15KIT	15 gallon kit

2A TO 1B VOLUME MIX RATIO

COLOR:
Clear

Smith's METALLIC & LUSTER — Mica Blended Pigments For Metallic Floor Coatings

Sold Separately:
Smith's ISC COLOR PACK — INDUSTRIAL SOLID COLORANT — 3.5% to 7% by volume

CURE TIMES

	60°F / 50% Humidity	72°F / 50% Humidity	85°F / 50% Humidity
Pot-life	35 min.	25 min.	20 min.
Working Time	75 min.	60 min.	50 min.
Recoat Window	Minimum Overnight - Up to 24 hours *Best practice is to degloss surface prior to topcoating for optimal appearance*		
Tack-Free	12 hours	8 hours	5 hours
Sandable	15 hours	12 hours	10 hours
Light Traffic (i.e. foot traffic)	32 hours	24 hours	20 hours
Heavy Traffic (i.e. parked vehicles, etc.)	72 hours	48 hours	36 hours
Full Chemical Resistance	10 days	7 days	7 days

CURED COATING PROPERTIES (DRY FILM):

Property	Test Method	Results
Abrasion Resistance, *mg/loss* *Taber Abraser	ASTM D4060	85 mg
Adhesion to Concrete	ASTM D4541	Pass - Concrete Fails
Elongation – (1/8" Cylindrical Mandrel)	ASTM D522	Pass
Hardness (Pencil)	ASTM D2370	2H
VOC's	ASTM D3960	≤3 g/L
Gloss 60°	ASTM D523	>90°
Viscosity – Mixed	ASTM D2196	390 cP
Volume Mix Ratio		2 Parts A to 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 & absorbency of concrete.
A one gallon mixture of Smith's Epoxy UCE[222] will cover:
Coverage Equation: 1604 ÷ milage = Wet Film Thickness

Mil Thickness (DFT)	Coverage per mixed gallon
20 mils	80 sq.ft.
25 mils	64 sq.ft.
30 mils	53 sq.ft.
35 mils	45 sq.ft.
40 mils	40 sq.ft.
45 mils	35.5 sq.ft.
50 mils	32 sq.ft.

**For best results, apply metallic body coats >30 mils (≤53 sq.ft. per gallon)*

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Typical Chemical & Stain Resistance

ASTM D 1308 Test Method 3.1.1 3 Covered Spot Test of a 3 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** – Damaged; **NR** - Not Recommended (Permanent Damage)*

ACIDS	24 hour Exposure
Acetic Acid 25% (Vinegar)	NR
Citric Acid 10%	E
Lactic Acid 88% (Milk)	NR
Phosphoric Acid 85%	NR
Sulfuric Acid 25% (Battery Acid)	E
Sulfuric Acid 98%	NR
Hydrochloric Acid 32% (Muriatic)	G
Nitric Acid 50%	NR
BASES	
Ammonium Hydroxide 10%	E
EBGE	E
Sodium Chloride 20%	E
Sodium Hydroxide 50%	E
Sodium Hypochlorite (Bleach)	E
Trisodium Phosphate 10%	E
ALCOHOLS	
Ethylene Glycol (Antifreeze)	E
Hand Sanitizer Gel (Purell®)	G
Isopropyl Alcohol 91%	E
Methanol	E
SOLVENTS	
Acetone	NR
d-Limonene	E
Mineral Spirits	E
PGMEA	NR
HYDROCARBONS	
Brake Fluid	NR
Gasoline	E
Hydraulic Fluid	E
Kerosene	E
Motor Oil (SAE 30)	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 (stain)
Povidone-iodine (BETADINE®)	D (stain)
Laundry Detergent 1% (Tide®)	E
Windex® (Ammonia Based)	E
Wine – Red	G (slight red stain)

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INSPECT THE SUBSTRATE: Ensure substrate is structurally sound, solid & free of any bond breaker contaminants *(including but not limited to oil, paint, densifier/sealers, curing compounds, wax, silicone, etc.)*.

TEMPERATURE & HUMIDITY: Substrate temperature & materials must be maintained between 60°F (15.5°C) to 86°F (30°C) with less than 80% Ambient Humidity for 24 hours prior to as well as for 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. Ambering will be more noticeable with lighter colors, both solid pigmented and Metallic & Luster, as well as when applied clear over decorative broadcast or color quartz
  - *Smith's Epoxy U.V. Absorber additive* (sold separately) can be used to lessen U.V. damage / discoloration
- A primer coat is required prior to application of Smith's Epoxy UCE[222]
- Not intended for use as a sealer over concrete stains or dyes
- When applying metallic body coat, a minimum thickness of 25 mils over the high points of the floor is required to reduce risk of surface tension crawling

CHECK FOR MOISTURE:

Interior Concrete Moisture Vapor & Alkalinity Testing – Concrete moisture vapor testing is highly recommended prior to application of this product over interior concrete to attain long-term adhesion as well as help identify potential hazards, such as contaminates, which may pose a risk for delamination, chemical attack, etc. that may not be caused by moisture vapor emissions or high alkalinity.

UTILIZE MULTIPLE TEST METHODS to obtain a broad view of the conditions prior to proceeding. *Follow the maximum moisture threshold for the primer product that is directly in contact with the bare concrete.*

ASTM F2659	*<3% MC (used to determine placement of below test locations)*
ASTM F1869	*<3 lbs. / 1,000 sq.ft. / 24 hours with 9 to 12 pH*
ASTM F2170	*<75% Relative Humidity*
ASTM F3441	*9 to 12 pH using a pH Pen with Distilled Water*

**Additional testing & treatment may be necessary below 8.5 or greater than 12 pH*

Visit www.astm.org to purchase the test methods. Interior environments require an acclimated environment for the results to be valid & conclusive for ASTM F1869 & F2170.

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.

Smith's Epoxy MAC100, *Smith's Epoxy MAC125*, *Smith's Epoxy VCB[38]* or *Smith's Epoxy VCB[46P]*, in conjunction with proper testing & mechanical preparation, can suppress the moisture vapor emission rate to a level within the tolerance of subsequent coatings & traditional floor covering needs.

Smith Paint Products is strictly a product manufacturer which 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 contaminant 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 & the course of action for remediation.

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

- AAR (Alkaline Aggregate Reaction)
  - o ACR (Alkali-Carbonate Reaction)
  - o 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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SILICATE CONTAMINATION – Substrates previously treated with 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. In some cases where the concrete did not have enough available calcium hydroxide for the silicate to react with when originally applied may result in crystallized yet unreacted, water soluble silicates which may expand beneath a coating causing the surface of the concrete to fracture at the bond line between the coating & the concrete.

Potential silicate contamination may be seen during traditional moisture testing with 11.5 to 14 pH along with CaCl results below 6 lbs. & RH readings above 85%. In such cases, concrete cores samples in conjunction with Petrographic Analysis may offer the most in-depth analysis of the situation.

Concrete contaminated with silicate densifiers / hardeners of these types must be mechanically prepared followed by cleaning *Smith's Green Clean Pro* 24 hours prior to moisture vapor & pH testing in order to obtain accurate readings.

NOTE:
- *DO NOT USE* MURIATIC / HYDROCLORIC ACID TO PREPARE CONCRETE AS CHLORIDE CONTAMINATION MAY OCCUR
- When etching, ensure all *Smith's Green Clean Pro* has been thoroughly removed with potable water with no remaining soapy residue or cement slurry
- *DO NOT USE Smith's 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

OIL CONTAMINATION – *Smith's 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.

DO NOT USE simple green® or Soy based detergents.

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 *Smith's 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 *Smith's Epoxy MAC125* primer. Allow to cure for a minimum of 5 hours or overnight then use a 100 to 120 grit 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 to remove the sanding dust then tack rag with Acetone *(DO NOT USE Denatured Alcohol or Xylene)* on a microfiber mop repeating with a fresh, clean microfiber until no dust residue can be seen on the microfiber.

CHEMICAL CONTAMINATION – Chemical contamination should be determined & may require additional testing. Once the type of contaminant is determined, contact Smith Paint Products for remediation recommendations while following local regulations regarding contaminant & disposal.

TEMPORARY HEAT: *Moisture vapor is emitted by fueled temporary heaters which creates condensation to occur on the floor surface and may cause an amine blush with epoxy products. Many temporary heating methods also can 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
  - Fisheyes are a result of surface contamination or an amine blush
- Ensure exhaust emissions & toxic fumes from temporary heaters exhaust to the exterior of the building to prevent health hazards & damage to work.
- Always clean the mechanically prepared surface with *Smith's Oil Clean* using an auto-scrubber followed by a thorough clean water rinse when temporary heat has been in use

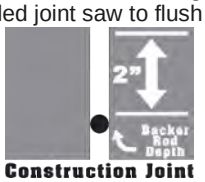
JOINTS & SUBSTRATE REPAIRS: Honor expansion joints at the finish floor elevation. Follow ACI 224.3R-95: Joints in Concrete Construction guidelines for proper filling joints.

ACI® recommends allowing a concrete slab to cure for a minimum of 60 to 90 days or longer to allowing the slab to shrink & acclimate to the intended joint width thus reducing the risk of joint wall separation from the joint filler.

Cooler climate applications must be remain 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 *Smith's Poly JF* or *Smith's Poly JF/FC*, ideally longer if possible. Static joints may allow the coating system to bridge over *Smith's Poly JF* but it is NOT recommended to install a floor coating system over caulking, silicone, cement patching compounds, Polyurea & traditional Polyurethane flexible joint fillers.

Always route out joints with an appropriate width diamond cutting blade attached to a vacuumized & dust controlled joint saw to flush out debris & freshly clean the side walls of the joint. Ensure that all loose edges & broken pieces of the concrete are removed & repaired prior to joint filling. Should joint walls require extensive repairs, cut out the weak concrete back to a sound, solid area then infill with *Smith's SKM*, *Smith's Epoxy FRM*, *Smith's PCF-45* mixed with sand or similar.

Control Joint



Construction Joint

Support the joint filler & assist in sag reduction by filling the bottom of the joint with a bond breaker, such as sand, especially for use in shallow joints less than 2" depth. *Use backer rod only if the joint filler is to be applied greater than 2" above the backer rod.* Fill the joint with *Smith's Poly JF* or *Smith's Poly JF/FC* twice as deep as the joint width.

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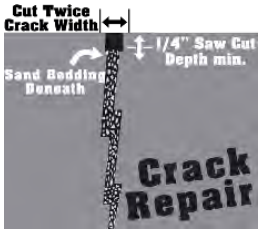
***CONCRETE SUBSTRATE REPAIRS* Patching for Resinous Coating Applications –** Patching of chips, gouges, etc. may be repaired with a variety of different, compatible coating materials, to include, *Smith's SKM*, *Smith's Epoxy FRM* mortar, *Smith's Epoxy GEL-150*, *Smith's Epoxy U100* or *Smith's Epoxy FC125* mixed with Silica Fume, *Smith's Poly PCF-45* or similar.



Saw cut cracks open with crack chaser to remove the weak wall of the crack on both sides & clean out debris then thoroughly vacuum prior to repairs. Small, isolated uneven, low gouges can be prepared using a needle scaler. Ensure resinous patching products are hard enough to walk on without imprinting or damage before proceeding with next step.

PREPARING WOODEN SUBSTRATES: Wood substrates must be sound, solid, free of contaminants such as oil, wax, sealers, paint, etc. & without any insect damage or rot.

The wood substrate should not deflect under a 300 lbs. load more than the "span" divided by 360 for residential use or by 720 for commercial applications per ASTM C 627 *(i.e. Deflection from 300 lbs. concentrated load standard test method)*.

- 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. Properly anchor any loose boards to the joists prior to sanding the entire surface to be coated thoroughly then vacuum to remove all dust & debris paying close attention to seams, board joints, knot holes, fastener holes, etc. Seal off any holes / penetrations using an expansive foam sealant, which may require use of a fire stop foam depending on local building codes. All board joints or other voids which may allow liquid to leak through should be filled with an appropriate resinous based product, such as:

- *Smith's SKM*
- *Smith's Epoxy GEL-150*
- *Smith's Poly-JF* or *Smith's Poly-JF$_{FC}$*

or similar, prior to priming with *Smith's Epoxy FW^{38}*.

- *Smith's Epoxy FW^{38}* – Coat with a minimum of 50 mils of *Smith's Poly-FLEX* within 3 hours up to 24 hours at 72°F

Smith's Poly-FLEX is recommended as a base coat over wooden substrates at a minimum application thickness of ≥50 mils prior to installation of Metallic & Luster system or other resinous floor coating systems to yield a rigid, yet flexible base to minimize wood seam crack telegraphing to the finish surface.

Please note that excessive deflection as well as excessive expansion / contraction of an unstable / unsound wooden substrate may result in crack telegraphing through the metallic coating system finish.

NON-POROUS SUBSTRATES & EXISTING COATINGS:

Always clean the surface prior to mechanical preparation to ensure potential bond breakers & surface contaminates have been thoroughly removed to avoid spreading the contamination across the floor. Once clean, sound & solid substrates should be checked for compatibility with Smith's Epoxy UCE^{222} & if compatible, begin mechanically abrading the surface to remove any weak areas & 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 & 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 Smith's Epoxy UCE^{222} 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.

PRIMING:

After mechanically preparing the substrate, prime with:

Concrete –

- *Smith's Epoxy FW^{38}* – Coat after 2 to 3 hours at 72°F up to 24 hours
- *Smith's Epoxy U100* – Coat after 4 to 5 hours at 72°F up to 24 hours
- *Smith's Epoxy FC125* – Coat after 2 ½ to 3 hours at 72°F up to 24 hours
- *Smith's Epoxy MP^{300}* – Coat Overnight at 72°F up to 24 hours
- *Smith's Epoxy VCB^{38}* – Coat after 3 to 4 hours at 72°F up to 24 hours
- *Smith's Epoxy VCB^{46P}*– Coat after 3 to 4 hours at 72°F up to 24 hours

Oil Stop priming (over concrete only):

- Remove oil with *Smith's Oil Clean* then mechanically prepare the substrate to a CSP 3 to 5 prior to installing the 2 coat priming process for *Smith's 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:

- *Smith's Epoxy FW^{38}* – Recoat when hard set, typically within 2 to 3 hours at 72°F

Existing Ceramic or Porcelain Tile

Diamond grind then prime with:

- *Smith's Epoxy MAC100* at 7 to 10 mils – Overnight cure at 72°F
- *Smith's Epoxy MAC125* at 7 to 10 mils – 2 to 3 hour cure at 72°F
- *Smith's SKM* flat trowel applied skimcoat – 2½ to 3½ hours at 72°F

Pronounced Grout Joints (below surface crown of tile)

- *Smith's Poly-FLEX* (Self Leveling >1/32"/30 mils) – Coat within 4 to 5 hour at 72°F
- *Smith's Epoxy GEL-150* (Skimcoat & troweling) – Coat within 5 to 6 hour at 72°F
- *Smith's SKM* (Skimcoat & troweling up to 5") – Coat in 2½ to 3½ hours at 72°F

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MIXING: Mix station & all application equipment should be ready for immediate use prior to mixing any product due to the epoxy pot-life once mixed. To optimize the pot-life, working time on the floor & flow time after placement, mix no more than 3 gallons of epoxy per batch while continuously mixing fresh epoxy for placement & application into a fresh, wet edge.

Higher temperatures will shorten pot-life.

Open all Part A's of Smith's Epoxy UCE[222] then pre-mix using a low speed 1/2" drill (300 to 450 RPM) with a clean mixing paddle for 2 minutes. Optional color should be pre-mixed with Part A at this time.

Full 3 gal – When mixing an entire 3 gallon kit of Smith's Epoxy UCE[222], pour Part B into the Part A pail then mechanically mix for 2 to 3 minutes using a low speed (300 to 450 RPM) drill with an appropriate paint mixing paddle.

- *Solid colors* = 1 can of Smith's ISC Color Pack to 3 gallon kit
- *Metallic colors* = 1 jar Smith's Metallic & Luster™ to 3 gallon kit

When adding the optional *Smith's Epoxy U.V. Absorber additive*, add 1 bottle per 3 gallon kit into Part A then pre-mix for 1 to 2 minutes prior to combining Part B while continuing to mix for 2 to 3 additional minutes.

Application method varies depending on the coating system. See appropriate system application guide for installation recommendations.

Mixing by Volume –

- *Optional Solid Colors* – Use 3.5% by Volume of *Smith's ISC Industrial Solid Color Packs* **Use Double ISC quantity for Whites, Greens, Orange, Safety Red or Yellows (i.e. 7% by volume)*
- *Optional Metallic colors* – Use 1 jar (600 grams) of *Smith's Metallic & Luster* per 3 gallons of Smith's Epoxy UCE[222]. May adjust between 4 to 16 oz. per gallon for effects – 1 jar is equivalent to 7 ounces per 1 gallon of epoxy
- *Optional U.V. Absorber additive* – Add 5% by Volume of *Smith's U.V. Absorber*

Pour contents of Part B into Part A pail then mix using a ½" low speed drill (<450 RPM) with a paint mixing paddle for 2 to 3 minutes. Immediately pour out the mixed Smith's Epoxy UCE[222] in ribbons onto the floor & continue this process tying into the wet edge with freshly mixed Smith's Epoxy UCE[222] until complete.

NOTE:

- *DO NOT TURN THE MIXING VESSEL UPSIDE DOWN ON THE SUBSTRATE TO ALLOW THE RESIDUAL PRODUCT TO DRAIN ONTO THE FLOOR due to high risk of non-thoroughly mixed residual from bottom or sides of the pail contaminating the floor*
  - Best practice, pour contents of mixing vessel into a new container, mechanically stir in the transfer container to ensure thorough blending then transport to the floor for application
- When using Smith's Epoxy UCE[222] Part A's containing color packs added on a previous day, always stir or drill blend the Part A's again prior to use
- "BOX" Smith's ISC solid color packs, especially if using color packs from multiple batches, to ensure consistent solid colors
- When applying metallic body coat, a minimum thickness of 25 mils over the high points of the floor is required to reduce risk of surface tension crawling
  - APPLY Metallic Body Coats at 35 to 45 sq.ft. per gallon for optimal mottling

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

CLEAN-UP: Clean up wet epoxy on tools, equipment, etc. with an appropriate solvent (i.e. Acetone, Xylene).

Hardened epoxy will need to be mechanically removed.

OPTIONAL LAYERS or TOPCOATS: Allow the surface of Smith's Epoxy UCE[222] to thoroughly harden before walking on, sanding or applying additional layers and / or topcoats. Cooler temperatures will extend the cure time while hotter temperatures will reduce pot-life & cure times.

**See page 1 for approx. cure time references based on typical application temperatures*

RECOAT WINDOW: **See page 1 for approx. recoat window based on typical application temperatures*

Sand, clean then solvent wipe / tack rag between coats for optimal appearance, especially when a gloss topcoat will be the final layer. After allowing Smith's Epoxy UCE[222] to cure overnight, use a low-speed floor machine with 100 to 120 grit screens to scuff the surface thoroughly, clean then tack rag, first dry then slightly dampened with Acetone to remove dust prior to applying topcoats.

Recommended Topcoats:

- *Smith's CRU'86*™ (High Gloss, Low Odor, 86% Solids, Chemical Resistant Polyurethane)
- *Smith's Poly WB+*™ (Gloss or Low Sheen Waterborne 2K Polyurethane)
- *Smith's MCU-60*™ (Solvent-based, High Gloss 60% Solids, Moisture-Cured Urethane)
- *Smith's Polyaspartic 5000$_{LO}$*™ (Low Odor, High Gloss, High Build, 87% Solids Polyaspartic)
- *Smith's Hi-Wear 90S*™ (Low Odor, Low Sheen, 90% Solids High Traffic Chemical Resistant Urethane)

SLIP RESISTANCE: Smith Paint Products 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 & end users' responsibility to determine the appropriate traction needs & footwear necessary for the conditions 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. See data sheet for *Smith's Resin Sand* or *Smith's Glass Bead* for instructions.

Please note that the Part C for Smith's Hi-Wear 90S nor use of Smith's A/O 325 low sheen additive in Smith's CRU'86 or Smith's MCU-60 are too small to provide non-skid traction improvement and are not considered a traction additive for greater slip resistance.

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MAINTENANCE: *The coating system must be allowed to cure for no less than one week before using any mechanical cleaning equipment on the surface & no less than 3 days before neutral cleaner. This includes auto-scrubbers, swing buffers, sweepers, etc. Only dust and wet mopping may occur the first week.*

Dust mopping, removal of debris and regular cleaning is crucial to maintaining the aesthetics of the coating and obtaining the maximum life span of the floor coating system. Cleaning cannot occur too often and inefficient cleaning will cause the floor to wear out prematurely and possibly stain or discolor depending on what comes in contact with the floor. Spills should be removed quickly. *Avoid the use of Polypropylene or abrasive bristle* (Tynex®) brushes as these brushes will cause the development of scratch patterns and lessen the sheen.

To maximum your investment with proper floor care and maintenance, remove all particles that may scratch and/or dull the floor coating using the least aggressive method necessary to clean the floor.

- Daily = Sweep and dust mop or water only mopping/auto-scrubbing; spot clean spills & oils
- Weekly or Monthly = Scrubbed once per week or month depending on the amount & type of soils present.

DETERGENT: Always use the least aggressive detergent necessary to remove the residue. A neutral pH floor detergent is recommended for general purpose cleaning. Use *Smith's Oil Clean*, or similar degreaser, for more degreasing and heavy duty weekly or monthly cleaning.

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.

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

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.

Rubber tires are prone to plasticizer migration, especially aviation tires and high performance car tires. Plasticizer will stain coating and 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 hangar 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 and the contact point of the tire when storing rubber tired vehicles on any floor, including floor coating systems. Some tire stains can be removed is cleaned before a set-in stain occurs using a d-Limonene based degreaser and some mild agitation using an orbital, low speed floor machine.

LIMITED LIABILITY: Liability is limited to replacement of defectively manufactured product of the same type and cost of the originally purchased product upon presentation of a valid, fully paid invoice at the time of a claim. No warranty shall be granted for outstanding invoices or for accounts with unpaid balances until paid in full. No damages, whether consequential, liquidated or other, shall be provided under this Limitation of Liability and Limited Warranty. Should a product defect be suspected at the time of application, cease use of the product immediately and notify Smith Paint Products for investigation as you will be responsible for the cost to repair or replace any work performed with product(s) suspected of defect. Record batch codes and save all products you purchased in order for any warranty to occur allow with the invoice that matches said quantity. Defects determined after installation must be reported to Smith Paint Products within 10 business days of discovery.

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