METALLIC EPOXY

PRODUCT DESCRIPTION

METALLIC EPOXY is supplied as a 100% solids, self-leveling epoxy designed to be used with Metallic Additive and dropped over a tinted basecoat applied to sealed concrete. The epoxy is resistant to blush and has an extended working time for maximum control and freedom to create any design with dramatic color movement, depth, and shine.

FEATURES & BENEFITS

- Self Leveling
- Seamless
- Solvent Free
- Chemical Resistant
- Durable
- Excellent Adhesion Properties
- Impact Resistant
- Safe For Incidental Food Contact
- User-Friendly Work Time

RECOMMENDED USES

- Combine with **Metallic Additive**
- Add 16 oz. acetone.
- Protect with a Simiron topcoat.

PRODUCT INFORMATION

PRODUCT NAME	SIZE	COLOR/FINISH	ITEM NUMBER
Metallic Epoxy Base	2-Gallons	Neutral / Gloss	40012717
Metallic Epoxy Activator	1-Gallon	Neutral / Gloss	40012724

3 gallons Metallic Epoxy is pigmented with a 32 oz. jar Metallic Additive.

TECHNICAL DATA

PHYSICAL DATA	
Components	2 (Base & Activator)
Color	Clear
Finish	High Gloss
Mix Ratio (by volume)	2 Base: 1 Activator
Curing Mechanism	Chemical reaction between components
Solids by Volume	100%
Solids by Weight	100%
Mixed Viscosity	700 cP
VOC (EPA Method 24)	0 g/L

THEORETICAL COVERAGE	
Wet Mils (microns)	32 - 80 (813 - 2032)
Coverage sq. ft./gal. (m^2/L)	20 - 50 (.49 - 1.23)

CURE TIMES @ 72°F (25°C) 50% RH *	
Work Time	30 – 35 minutes
Tack Free	6.75 hours
Light Foot Traffic	16 hours
Heavy Traffic	5 days
Full Cure	1 week
Minimum Recoat	16 hours
Maximum Recoat	48 hours **

**Higher temperatures will shorten pot-life and working time.*
***Apply another coat of epoxy or a topcoat within 48 hours of the initial coat of Metallic Epoxy. If the re-coat window is missed, the coating system will need to be sanded.*

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PHYSICAL PERFORMANCE PROPERTIES

PHYSICAL PROPERTIES	TEST METHOD	RESULTS
Adhesion	ASTM D7234	> 400 psi (100% Concrete Failure)
Compressive Strength	ASTM D695	11,600 psi
Flammability	–	Self-extinguishing over concrete
Flexural Strength	ASTM D790	12,800 psi
Gloss @ 60° Angle	ASTM D523	> 90
Hardness, Shore D (48 hours / 1 week w acetone added)	ASTM D2240	67 / 86
Taber Abrasion (CS17 Wheel, 1000 g Load, 1000 Cycles)	ASTM D4060	50 mg loss
Tensile Strength	ASTM D638	9,600 psi
QUV Resistance (100 hrs in QUV)	ASTM G154	Ecmc = 8 (std epoxy 35), gloss 87-89

CHEMICAL RESISTANCE

CHEMICAL	RESULTS
10% Acetic Acid	G
Vinegar	G
10% Citric Acid	G
10% Hydrochloric Acid	G
30% Hydrochloric Acid (muriatic)	G
10% Nitric Acid	G*
50% Phosphoric Acid	F
10% Sulfuric Acid	G
37% Sulfuric Acid	F
70% Sulfuric Acid	F
20% Ammonium Nitrate	E
20% Sodium Chloride	E
50% Sodium Hydroxide	E

CHEMICAL	RESULTS
Methyl Ethyl Ketone	G
Xylene	F
Ethylene Glycol	G
Isopropyl Alcohol	F
Mineral Spirits	E
Brake Fluid	F
Transmission Fluid	E
Motor Oil	E
50: 1 Gas/Oil Mixture	E
E85 Gasoline	E
E95 Gasoline	E
Unleaded Gasoline	G
Skydrol	E

CHEMICAL	RESULTS
Betadine	G*
Bleach	E
Urine	E
Coffee	E
Cola	E
Ketchup	G
Mustard	G
Red Wine	E

*Stain is only defect.

KEY	
E = Excellent	G = Good
F = Fair	NR = Not Recommend

SURFACE PREPARATION

Concrete and coated concrete surfaces must be sound, clean, dry and free of contaminants such as dirt, dust, grease, oil, silicones and other contaminants that may negatively affect adhesion.

MOISTURE VAPOR BARRIER:
A suitable moisture barrier must be in place for concrete slabs on-grade. If a moisture barrier is not in place, seasonal variations in ground moisture can cause excessive moisture vapor transmission (MVT) regardless of results measured prior to coating application. MVT rate must not exceed three pounds per 1,000 square feet per 24 hours, as directed by ASTM F1869. The relative humidity (RH) of the slab must not exceed 75%, as directed by ASTM F2170. If there is a moisture situation in excess of the above rate, the use of Simiron MVB Moisture Vapor Barrier Primer may be required. Consult a Simiron Representative for details and application procedures.

This epoxy is designed to be used with metallic additive and dropped over a tinted basecoat applied to sealed concrete. Please see the appropriate PDS for other products.

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SAFETY AND TECHNICAL

Refer to the SDS sheet before use. Safety precautions must be strictly followed during storage, handling, and use. Personal Protective Equipment (PPE) should be worn at all times. PPE will include (but is not limited to): Safety glasses with side shields and high-quality nitrile gloves. To acquire additional information or technical and safety data, please visit: www.simiron.com.

TEMPERATURE

Air	60° – 85°F	16° – 29°C
Surface	60° – 85°F	16° – 29°C
Material	60° – 85°F	16° – 29°C

Higher temperatures will shorten pot-life and working time.
Floor temperature must be at least 5 degrees over the current dew point.

APPLICATION EQUIPMENT

Assemble all equipment. Equipment will include (but is not limited to):

1. Drill and Jiffy® type mixing blade
2. Spiked Shoes
3. Flat EPDM squeegee.
4. 3/8" shed-resistant woven roller covers with phenolic core - free or locked (tape to remove loose roller hair).
5. Edge rollers, chip brushes
6. Painter's tape, duct tape, measuring and mixing containers

APPLICATION PROCEDURE

Metallic Epoxy mix ratio is 2 Parts Base to 1 part Activator by volume. We recommend installing the epoxy over a tinted basecoat applied over sealed concrete to reduce outgassing on uncoated concrete floors.

1. Pre-mix Base at low speed for 1 minute. Mix in 16 oz. acetone, then add 32 oz. **Metallic Additive** and mix very well in order to break up pigment agglomerate. Add Part B and mix for three minutes until uniform. Do not mix more material than can be applied in 20 – 30 minutes (material will stiffen or tack-up.)
2. Immediately pour all mixed material on the floor in beads or puddles. Do not scrape sides or leave pail overturned to drain. Do not attempt to roll material out of a bucket or roller pan.
3. For designs with multiple colors, repeat the steps above for each.
4. Wearing spiked shoes, use a tool preferred by the artist to blend colors in order to ensure consistent coverage to minimize application lines and leave a consistent film thickness. *Do not work the material after it begins to get sticky. The epoxy will not level and colored epoxy may turn a different shade.*

CLEAN UP & DISPOSAL

Clean up mixing and application equipment immediately after use. Use acetone or xylene; do not use alcohol. Follow solvent manufacturer's safety instructions. Be sure to follow all local, state and federal regulations when disposing of materials.

MAINTENANCE

To maintain the appearance and extend the life of the newly sealed surface, it is imperative to have a routine maintenance program. Dirt and debris that is tracked over a finished floor will quickly scratch and dull the surface. Place walk-off mats at entrances. Sweep and mop/scrub floors regularly using soft bristles/pads and a mild cleaner. Some cleaning products and equipment or improper use of these can damage a surface. Remove spills quickly to minimize damage and/or stains. For systems that support parked vehicles or other heavy items on rubber wheels, place a small piece of nonporous material, such as sheet metal or plexiglass between the tires and floor to prevent tire marks. Reapplication may be necessary in heavy traffic areas.

LIMITATIONS

- Do Not apply outdoors or where the epoxy is subject to high UV exposure.
- Do not apply at a temperature or thickness not recommended.
- Do not delay in pouring mixed material onto the floor.
- Do not apply over loose or unsound concrete, asphalt or bitumen substrates, glazed tile or nonporous brick and tile, magnesite, copper, metal, polyesters, or elastomeric membranes.
- Moving joints and shrinkage cracks may reflect through system. Joints that are designed to move may reflect through the finished flooring system if the are not honored.
- Tire marking may occur.

SHELF LIFE AND STORAGE

12 months from date of manufacture when stored indoors in the original unopened container at 60°F – 85°F (16°C – 29°C) in a dry location with humidity below 65%.

- Do not allow materials to freeze.

TECHNICAL ASSISTANCE

Information is available by calling SIMIRON
Toll Free: **1.866.515.8775** / **+1.248.686.3600**

LIMITED WARRANTY

SIMIRON warrants this product to be free from defect in the material that affects its performance for a period of one year (from date of purchase). SIMIRON will replace at no charge the quantity of the Coating that SIMIRON determines has failed to perform, as the sole and exclusive remedy for any breach of this warranty and/or any other defect or failure of the coating. Proof of purchase is required. Cost of labor for application of any product specifically is excluded. Warranty is void if Simiron products are mixed with or used in conjunction with materials that are substituted for Simiron products. Warranty is nontransferable.

PRODUCT DATA SHEET: 02/05/2026

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