

# Epoxy Flow LV



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## High Performance Low Viscosity Coating For Designer Metallic Flooring

- 100% Solid Epoxy Resin
- Low Viscosity
- 16-24 Hour Cure Time
- Excellent Gloss Retention

### DESCRIPTION

Epoxy Flow LV is a clear 100% solids low-viscosity epoxy designed for use with metallic pigment applications, as well as other epoxy applications requiring additional working time. This two-part formula is an excellent option when NO special considerations are present. LV epoxy is suitable in coating systems approved for industrial, commercial, and residential settings.

### ADVANTAGES

- Moderate - Low viscosity, great leveling properties
- Excellent clarity
- Can accept compatible pigments
- Can be used as a build coat where more working time is required

### LIMITATIONS

- Not designed for use in continuously submerged applications or where moisture vapor emission exceeds 5 lbs
- Lacks the long-term UV-stability of some other resin coating types

### PACKAGING

Available in 3 gallon kits (2 gallons Part A + 1 gallon Part B)

### COLORS

Available in clear, and able to accept compatible pigment packs

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**AVAILABLE COMPANION /ALTERNATIVE PRODUCTS****Epoxy Flow GEN** - Fast curing general use epoxy**Epoxy Flow GEN FAST** - Fast curing general use epoxy**Epoxy Flow MVB** - Moisture Vapor Barrier epoxy that protects up to 25 lbs**Epoxy Flow MVB FAST** - Fast curing Moisture Vapor Barrier epoxy that protects up to 25 lbs**Poly Flow 100X** - 100% solids extended cure polyaspartic for UV-stable decorative metallic coats**Poly Flow 100** - 100% solids polyaspartic for general use**Poly Flow 90** - 90% solids polyaspartic for general use, excellent for flake and quartz topcoats**PHYSICAL PROPERTIES @ 77F (25C)****7-DAY CURE (UNLESS OTHERWISE STATED)**

VOC (Volatile Organic Compounds), (VOC Calculated Per ASTM 03960)	<5 gr.lt.
Mix Ratio, by Volume (A/B)	2:1
Minimum Application Surface Temperature	50F
Working Time, mins.	50 - 60
Pot life, 1 gallon (3.79 liters) Mass, Pot Life is Reduced by Increases in Mass & Temperature, mins.	30 - 45
Dry to Touch at 75F (240C)	7 - 8 hours
Recoat Time	12 - 14 hours
Shelf life (shipped and stored) at 40°F to 100°F (4.4C to 38C) Packaging 3 gal.	1 year
Compressive Strength, ASTM D695	12,500 psi
Tensile Strength, ASTM 0683	8,500 psi
Tensile Elongation, ASTM 0638	2.5%
Hardness (Shore 0), ASTM 02240	70 - 80
Adhesion, ASTM 07234	>400 psi
Water Absorption, 0570	NIL
Permeance, ASTM E96	0.017 (gr/ft <sup>2</sup> /hr/InHg 80 sqft/gal)
Moisture Vapor Emission Rate, F1869, Concrete Placed per ACI 302.2R ASTM EI745	5 Pounds
Gloss Index	60GU

**PLEASE BE ADVISED TO READ ALL PRODUCT INFORMATION BEFORE USE (TDS & MSDS)**

### **SURFACE PREP (as a decorative metallic or build coat)**

- **Profile:** The decorative metallic or build coat should be placed on an epoxy base-coated /primed surface, within that product's recoat window. When applied during the recoat window of the previously applied coat, a chemical bond is created. If the recoat window is exceeded, sanding or abrasion of the coating with 60-120 grit sanding screen ("de-glossing" the surface) may be necessary for a proper mechanical bond. Thoroughly vacuum the surface using a bristled dry floor wand.

SURFACE MUST BE CLEAN AND FREE OF OILS, WATER, AND DEBRIS

### **SURFACE PREP (as a base /primer coat)**

Proper surface preparation is critical to achieving long-term performance. Substrates must be structurally sound, clean, and dry prior to coating. Remove all contaminants including oils, curing compounds, loose coatings, laitance, dust, and surface moisture.

SURFACE MUST BE CLEAN AND FREE OF OILS, WATER, AND DEBRIS

- **Profile:** Concrete should be mechanically profiled to a minimum CSP 2–3 (ICRI guidelines), typically achieved by diamond grinding or shot blasting.
- **Moisture:** Confirm substrate moisture content is within acceptable limits. Moisture vapor emissions should not exceed 5 lbs/1000 sq. ft./24 hrs (ASTM F1869) unless this product is being used in conjunction with a moisture mitigation system.
- **Cracks & Repairs:** Address surface cracks, spalls, or divots with compatible patching material. Honor all control joints as per project requirements.
- **Testing:** Perform adhesion testing when substrate condition is in question.

Inferior concrete flooring slabs containing contaminants such as oil, stains, or other previous coatings will interfere with the bond.

- Contaminants include, but are not limited to: organic hydrocarbon materials, calcium chlorides and aluminum stearates.
- Concrete flooring slabs can lose their structural strength over time, caused by conditions beyond the control of the coating manufacturer or the installation contractor.
- If the concrete substrate deteriorates sufficiently, it will no longer support the bond of the coating system.

## MIXING

This is a two-component epoxy system. Thorough mixing is essential for product performance.

1. **Premix Part A** to re-incorporate any settled material.
2. If pigmenting the material, add pigment to Part A, and blend until completely incorporated.
3. Combine Part A and Part B at a 2:1 mix ratio by volume.
4. Mix using a low-speed drill with a Jiffy-style paddle for **2–3 minutes**, scraping the sides and bottom of the container to ensure a uniform blend.
5. Avoid whipping air into the mixture. Do not exceed recommended mixing time.
6. Once fully mixed, immediately pour the material onto the floor in ribbons or working sections to maximize working time and reduce heat buildup in the bucket.

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## TYPICAL APPLICATION GUIDELINES

Apply only in conditions where substrate and ambient temperatures are within the recommended range (60–85°F) and rising.

- **Spread:** Use a notched squeegee or trowel to spread the product evenly to the specified mil thickness. Coverage rate varies depending on use and surface porosity.  
3 gallon kit yield:
  - 100-135 sft @ 33-45 sft /gallon (metallic coat)
  - 240-390 sft @ 100-130 sft /gallon (base coat)
  - 450-540 sft @ 150-180 sft /gallon (primer /thin-mil coat)
- **Backroll:** Immediately backroll with a 3/8" non-shedding roller to even out the surface and eliminate squeegee lines.
- **Pot Life:** Working time varies by temperature but is generally 40-60 minutes at 70°F. Do not apply material after it begins to thicken or set in the container.
- **Recoat Window:** If a topcoat or additional coats are required, recoat within 12–14 hours. If this window is exceeded, mechanical sanding or abrasion with 60-120 grit sanding screen may be necessary for proper intercoat adhesion.
- **Traffic Ready:** Light foot traffic may be allowed after 12–18 hours. Full cure is typically achieved in 5–7 days depending on temperature and humidity.

Note: This data is not a guarantee against future problems. This is especially true if there is not a positive side vapor barrier, or it is not functioning properly and/ or concrete has contamination from oils, chemical spills, excessive salts or other bond inhibitors.

**CHECK CONCRETE MOISTURE**

Concrete must be dry before application of this floor coating material. Concrete moisture tests are required, either ASTM F1869 (calcium chloride) or ASTM F2170 (in situ RH probe). However, environmental and structural conditions (including the original concrete placement, rainfall, site drainage, etc.) contribute to the moisture readings taken at any particular time, and moisture content /emissions can change with a shift in conditions.

**Best practice is application of an epoxy moisture vapor barrier as the first coat on any coating system, even if moisture concerns are not present at the time of installation. Concrete with excessive moisture will require additional steps.**

**CHECK TEMPERATURE & HUMIDITY**

Floor and material temperature must be at or above the published Technical Data Sheet. Dew Point must be 50F (30F) or more below the surface temperature. Do not apply if humidity is at or above 85%.

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**SEE NEXT PAGE FOR PRODUCT WARNINGS AND WARRANTY INFORMATION**

**WARNING!** Harmful if swallowed. In contact with skin or if inhaled, causes severe skin burns and damage. May cause an allergic skin reaction. Causes serious eye damage. Harmful to aquatic life with long lasting effects.

**PRECAUTIONS:** Do not breathe dust /fume /gas /mist /vapor /spray. Wash hands /nails /face thoroughly after handling. Do not eat, drink, or smoke when using this product. Use only outside or well-ventilated areas. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear gloves /protective clothing /gloves/eye protection /face protection.

**FIRST AID TREATMENT:** IF ON SKIN, wash with plenty of water. IF SKIN irritation or rash occurs, get medical attention. Take off contaminated clothing and wash it before reuse. IN 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 attention.

**ENVIRONMENT:** Collect spillage.

**IN CASE OF FIRE:** Use supplier or the competent authority to specify appropriate safety measures.

**DISPOSAL:** Dispose content /container to an approved disposal plant in accordance with local or state regulations.

**KEEP OUT OF REACH OF CHILDREN.**



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**Limited Warranty:** For a period of one (1) year from the date of manufacture, the Matrix brand warrants that this product is free from defects in material and manufacturing. Any implied warranty applies only to the material itself and does not extend to installation methods, workmanship, or site conditions. The Matrix brand shall not be liable for any installation issues, failures, or damages unless proven to result directly from a defect in manufacturing. All other causes, including but not limited to improper installation, surface preparation, or environmental factors, are the sole responsibility of the installer or end user.