

TECHNICAL DATA

Product Description

Mult-E-Prime 505 provides an effective seal and bonding coat on unfinished concrete floors. Through careful formulation and the use of an epoxy resin system, Mult-E-Prime 505's extreme application flexibility allows its use as a seal coat before recommended finishes, as a one-coat sealer system to prevent dusting or a two-coat finish system that offers increased durability and sheen. Mult-E-Prime 505 also aids in the control of concrete out-gassing when used before additional coats.

Intended Uses

Apply to:

- Interior concrete surfaces
- Various industrial environments
- Main aisle
- Assembly areas
- Production areas

Protects:

- Concrete dusting
- Wheel traffic
- Against staining
- Against moisture absorption

The above are general recommendations and not intended to limit the use of Mult-E-Prime 505. Test areas are always recommended to confirm results.
NOT INTENDED FOR IMMERSION SERVICE.

Physical Properties

Resin Type	Epoxy
Finish/Sheen	Gloss, 80+ @ 60°
Colors (Part A)	Clear LF-0209
Cure (Part B)	Part B LM-0209
Solids by Weight	44%
Solids by Volume	39%
Theoretical Coverage*	625 ft ² /gal @ 1 mil
Dry Film Thickness / Coat	1.0–2.0 mils (25–50 microns)
Wet Film to Achieve DFT	2.5–5.0 mils (100–137.5 microns)
Coverage at DFT*	312–625 ft ² /gal
VOCs	4.45 lbs./gal (533 grams/liter)
Reduction Solvents	DO NOT THIN
Clean-up Solvents	Diamond Vogel N-3023 Xylol
Induction Time	45 minutes
Mixing Ratio (by volume)	1 part resin to 1 part cure
Pot Life	24 hours at 70°F (21°C) and 50% Relative Humidity
Drying Time**	Set to Touch: 2 hours at 70°F (21°C) and 50% Relative Humidity Recoat Minimum: 3 to 4 hours at 70°F (21°C) and 50% Relative Humidity Recoat Maximum: 24 hours at 70°F (21°C) and 50% Relative Humidity
ASTM D1640-83 reapproved 1989	

* Coverage rates are estimates based on the products volume solids and make no allowance for material loss during application. Actual spread rates may vary dependent on applicator experience, surface porosity and texture.

** Dry times vary with surface temperature, air movement, humidity and film thickness.

Surface Preparation

All surfaces must be cured, clean, sound, dry and free of all dirt, dust, efflorescence, wax, oil, grease, chalk, previously painted films, curing compounds, form release agents and any other contamination that would interfere with new coating adhesion. Bare surfaces must be properly prepared prior to application of this product.

Masonry Surfaces: New concrete should cure for a *minimum* of 30 days at 72°F (22°C) prior to coating application. If oil or grease is present, use of a cleaner/degreaser is required prior to shot-blasting or acid etching. All cleaning residue must be completely rinsed from the surface. It is recommended that bare concrete surfaces be roughened prior to coating application.

Shot Blasting: Shot-blasting equipment should be vacuum equipped to reduce amount of spent shot on floor. The profile produced should be uniform and the floor should be vacuumed after blasting to remove debris. Shot-blasting can be effective in removing previous paint films and curing compounds.

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Surface Preparation (continued)

Acid-etching: Prepare a 1:1 solution of muriatic acid and water. Apply the solution to the floor; if the concrete does not react to the acid solution by bubbling vigorously, a curing compound may be present and the floor will need to be mechanically abraded by shot-blasting. Scrub the floor with stiff bristle brushes or power floor scrubber with abrasive pad attachment until the bubbling reaction stops. Rinse the floor, preferably with high pressure water. If a high pressure rinse is not possible, rinse and remove water a *minimum* of three (3) times. **CAUTION! ACID SOLUTION AND/OR UN-NEUTRALIZED RINSE WATER MUST NOT BE ALLOWED TO FLOW INTO GROUND OR SEWER SYSTEM (DRAINS).**

Moisture Test: Test for moisture by taping a 2' x 2' plastic sheet over different areas of the floor. Examine the plastic after 24 hours for signs of moisture. If moisture is present, the floor should not be coated until the source of the moisture is determined.

Previously Painted Surfaces: Restore the surface to bare concrete by chemical stripping or shot-blasting and proceed as directed above. If oil or grease is present, use of a cleaner/degreaser is required prior to shot-blasting. All cleaning residue must be completely rinsed from the surface. Allow to dry.

Mildew: Remove by using a solution of one part household bleach and three parts water. Apply to mildewed area and scrub. Allow solution to remain on the surface for 3 to 5 minutes and then rinse completely and allow to dry before coating application.

Application

Part A (epoxy resin) and Part B (cure) have a 1:1 mixing ratio. Mix Part A and Part B separately using an explosion-proof power drill and blade type mixer. Add Part B to Part A and thoroughly mix and blend. Mix only the amount that can be used within the estimated pot life. For optimum application, apply when air and surface temperatures are between 65° and 95°F (18° to 35°C) and the relative humidity is above 40%. Lower temperatures and humidity will inhibit proper film formation. Application at elevated temperatures, certain wind conditions and/or low humidity may require special application procedures to achieve proper film formation. Do not apply to surfaces that are damp. Provide good ventilation by forced air movement and extinguish all pilot lights.

Pad or Roller: Use a lamb's wool pad or roller. Apply product in thin even coats. Maintain a wet edge. Allow the product to dry until tack free before recoating. Must be recoated within 24 hours to ensure intercoat adhesion. **DO NOT THIN.**

Airless Spray: Not recommended.

Packaging

Shipping Weight

Product	1 Gallon	5 Gallon	Product	1 Gallon	5 Gallon
Part A Resin	1 Gallon Pail	5 Gallon Pail	Part A Resin	8.6 lbs. (3.9 kg)	43 lbs. (19.5 kg)
Part B Cure	1 Gallon Pail	5 Gallon Pail	Part B Cure	8 lbs. (3.63 kg)	40 lbs. (18.14 kg)

Storage

Two years from date of manufacture when maintained in protected area at a temperature of 40° to 100°F (4° to 38°C). Subject to inspection thereafter.

Safety Precautions

***WARNING!** If you scrape, sand, or remove old paint, you may release lead dust. **LEAD IS TOXIC. EXPOSURE TO LEAD DUST CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE.** Wear a NIOSH-approved respirator to control lead exposure. Clean up carefully with a HEPA vacuum and wet mop. Before you start, find out how to protect yourself and your family by contacting the National Lead Information Hotline at 1-800-424-LEAD or log on to www.epa.gov/lead.

Paint products contain chemical ingredients, which are considered hazardous. Prior to use, read container label warnings and the current Safety Data Sheet for important health and safety information. Ensure these instructions are practiced during product application and cure. **Keep out of the reach of children.**

Safety Data

“Safety Data Sheets” are available from your Diamond Vogel representative or the Diamond Vogel website at www.diamondvogel.com. Prior to use of this product, obtain and review the Safety Data Sheet for health and safety information. Read and observe all precautionary notices on container labels. **NOT INTENDED FOR RESIDENTIAL USE.**

TECHNICAL DATA**Limited Warranty**

The technical data and suggestions for use contained in this document are true and correct to the best of our knowledge at the date of issuance. The statements of this document do not constitute a warranty, expressed or implied, as to the performance of these products. Since Diamond Vogel does not control the application of its products, or the condition of the surfaces to which they are applied, Diamond Vogel's liability will under no circumstances exceed replacement of the product. **All technical information is subject to change without notice.**

Additional Information

Epoxies will chalk and fade with extended exposure to sunlight. Yellowing is a normal occurrence. The use of heaters that emit carbon dioxide and carbon monoxide during application may cause excessive yellowing to occur.

Cautions and Warnings information is located on the back panel of each product label.

For current information regarding VOC regulations for specific geographical regions, please contact Technical Service at Diamond Vogel Corporate Headquarters, (Contact information is located at the bottom of the page).