

Vanberg Specialized Coatings

Armorcoat 65 Epoxy Metal Coating Data Sheet



PROFESSIONAL COATINGS

PRODUCT DESCRIPTION:

ARMORCOAT 65 METAL COAT is a two-component solvent-based epoxy coating that exhibits excellent characteristics for abrasion resistance, chemical resistance and substrate penetration. This product is suitable as a primer for high build coatings and urethane or as a stand-alone coating.

RECOMMENDED USAGE:

Recommended for priming or coating concrete, wood or metal. This product can withstand exposure to many common solvents and chemicals.

PACKAGING INFORMATION:

2-gallon kit (med. gray) #AC144-2
10-gallon kit #AC144-10

COVERAGE:

267 to 320 square feet @ 5-6 mils. Wet thickness.

CURE SCHEDULE:

Pot life - 2 gallon volume	3-5 hours @ 70° F
Tack free (dry to touch)	2-4 hours @ 70° F
Recoat or topcoat	4-6 hours @ 70° F
Light foot traffic	16-24 hours @ 70° F
Full cure (heavy traffic)	2-7 days @ 70° F

LIMITATIONS:

- Colors may be affected by high humidity, low temperatures or chemical exposure.
- UV light exposure can cause slight discoloration.
- Slab on grade requires moisture barrier.
- Substrate temperature must be 5° F above dew point.
- All new concrete must be cured for at least 30 days.
- Product color will vary from batch to batch.
- Physical properties are typical values and not specifications.
- Light or bright colors, (white, safety yellow, etc.) may require multiple coats or a topcoat to achieve a satisfactory hide, depending on the substrate.
- See reverse side for application instructions.
- See reverse side for limitations of our liability and warranty.

CHEMICAL RESISTANCE:

<u>REAGENT</u>	<u>RATING</u>
Acetic acid 5%	A
Xylene	B
MEK	A
Gasoline	B
10% sodium hydroxide	E
50% sodium hydroxide	D
10% sulfuric acid	C
10% hydrochloric acid	C
20% nitric acid	A
Ethylene glycol	C

Rating key: A - not recommended, B - 2 hour term splash spill, C - 8 hour term splash spill, D - 72 hour immersion, E - long term immersion. NOTE: extensive chemical resistance information is available through your sales representative.

GENERAL PRODUCT DATA	
FEATURE	ADVANTAGE
MIX RATIO	1 Part A to 1 Part B by volume
RECOMMENDED FILM THICKNESS	5-6 mils per coat wet thickness (yields 3 mils dry).
APPLICATION TEMPERATURE	40-90° F.
COLORS AVAILABLE	White, off white, light gray, medium gray, dark gray, charcoal gray, tile red, brown, tan, beige, light blue, blue, green and special colors upon request.
FINISH CHARACTERISTICS	Satin gloss (30-60 at 60 degrees @ Erichsen gloss meter)
PRIMER	None required.
TOPCOAT	Optional – Many products are suitable as topcoats including multiple coats of this product. For added chemical resistance, color stability or UV stability, topcoat with a suitable aliphatic urethane.
SOLIDS BY WEIGHT	Mixed = 65% (+/- 2%)
SOLIDS BY VOLUME	Mixed = 52% (+/- 2%)
VISCOSITY	Mixed = 300-500 cps (typical)
FLEXURAL STRENGTH	2,700 psi @ ASTM D790 - 1/2" x 1/2" bars span 4"
YIELD COMPRESSIVE STRENGTH	3,100 psi @ ASTM D695 - 1/2" x 1/2" bars
TENSILE STRENGTH	2,140 psi @ ASTM D638 – testing dimensions F=2.25", W=0.500", T=0.125", D=4.5" and rate = 0.2"/minute
ULTIMATE ELONGATION	90%
GARDNER VARIABLE IMPACTOR	50 inch pounds direct – passed
ABRASION RESISTANCE	Taber abrasor CS-10 calibrase wheel with 1000 gram total load and 500 cycles = 30.2 mg loss
ADHESION	375 psi @ elcometer (concrete failure, no delamination)
HARDNESS	Shore D = 40
FLEXIBILITY	No cracks on a 1/8" mandrel.
VOLATILE ORGANIC CONTENT	Part A = 3.43 pounds per gallon Part B = 3.75 pounds per gallon
DOT CLASSIFICATION	Part A "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII" Part B "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII"
SHELF LIFE	1 year.

PRODUCT STORAGE:

Store product in an area so as to bring the material to normal room temperature before using. Continuous storage should be between 60° and 90° F.

SURFACE PREPARATION:

Surface preparation will vary according to the type of complete system to be applied. For a one or two coat thin build system (3-10 mils dry) we recommend either mechanical scarification or acid etching until a suitable profile is achieved. For a complete system build higher than 10 mils dry, we recommend a fine brush blast (shot blast). All rust, dirt, oil, dust, foreign contaminants and laitance must be removed to assure a trouble-free bond to the substrate. Rust can be converted using VSC RUST CONVERTER. A test should be made to determine that the concrete is dry. This can be done by placing a 4'x4' plastic sheet on the substrate and taping down the edges. If after 24 hours, the substrate is still dry below the plastic sheet, then the substrate is dry enough to start coating. The plastic sheet test is also a good method to determine if any hydrostatic pressure problems exist that may later cause disbonding. Rough and eroded areas need to be patched prior to coating with acceptable material.

PRODUCT MIXING:

This product has a one to one mix ratio by volume. Merely mix equal volumes such as 1 gallon of Part A to 1 gallon of Part B. After the two parts are combined, mix well with slow speed mixing equipment such as a prop mixer until the material is thoroughly mixed and streak free. If temperatures are below 55° F., let the material induct for ten minutes to help reduce the possibility of developing an epoxy blush. If decanting, pre-mix colored resin.

PRODUCT APPLICATION:

The mixed material can be applied by brush, airless sprayer or epoxy roller. Maintain temperatures within the recommended ranges during the application and curing process.

RECOAT OR TOPCOATING:

If you opt to recoat or topcoat this product, you must first be sure that all of the solvents have evaporated from the coating during the curing process. The information on the front side is reliable guidelines to follow. However, it is best to test the coating before recoating or topcoating. This can be done by pressing on the coating with your thumb to verify that no fingerprint impression is left. If no impression is created, then the recoat or topcoat can be started. Always remember that colder temperatures will require more cure time for the product before recoating or topcoating can commence. Before recoating or topcoating, check the coating to insure no epoxy blushes were developed (a whitish, greasy film or deglossing). If a blush is present, it must be removed prior to topcoating or recoating. A standard type detergent cleaner can be used to remove any blush. Many epoxy overlays and coatings as well as urethanes are compatible for use as a topcoat for this product as well as multiple coats of this product.

CLEAN UP:

Use SOLVENT 101 or Xylol to clean tools immediately after installation. Follow product guidelines for safe use. Must allow adequate ventilation.

DISPOSAL:

Empty containers may contain product residue, including flammable or combustible vapors. Do not cut, puncture or weld near these containers. Label warnings must be observed until containers have been commercially cleaned or reconditioned. Containers to be thrown out must be disposed of in accordance with federal, state and local regulations. Use only licensed hazardous waste disposal companies if required.

PRECAUTIONS:

Carefully read product labels, application guidelines and Material Safety Data Sheet before using all products. Contact with liquids may cause irritation. Use appropriate safety gear including eye protection. Must allow adequate ventilation.

ADDITIONAL INFORMATION:

For additional information or application help regarding this product or others please contact Vanberg Specialized Coatings at 1-800-874-0631 or www.vanbergcoatings.com

WARRANTY STATEMENT

Information about VSC products is given to the best of our knowledge, based on tests and experience. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you will make your own tests to determine the suitability of the product for your particular purpose. As products are often applied or used under conditions beyond our control, VSC cannot guarantee anything but the quality of its products. VSC warrants that its products meet the specifications set forth by VSC, but we reserve the right to change any given specification without prior notice. VSC DISCLAIMS ALL WARRANTIES RELATING TO THE PRODUCTS AND THEIR APPLICATION, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Receipt of VSC products constitutes acceptance of the terms of this limited warranty and the terms and the conditions set out in our invoice, contrary provisions of buyer's purchase documents notwithstanding. Upon receipt of merchandise, purchaser has 30 days to notify VSC in writing that materials are defective. In the event VSC finds that the product delivered is off specification, VSC will, at its sole discretion, either replace the product or refund the purchase price thereof, and VSC's choice of one of these remedies is the buyer's sole remedy. In no event shall the liability of VSC exceed the purchase price of shipped merchandise. Claims must be in writing. Claims after 30 days are void. VSC will under no circumstances be liable for special, incidental or consequential damages. This warranty supercedes all other guarantees, whether oral or written, and whether expressed, implied or statutory. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Certain products may contain chemicals which may cause serious physical injury. Before using, please read the Material Safety Data Sheet and follow all precautions to prevent bodily harm.



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