



## RESINS

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# AR - MVB Ultra Rapid

## Technical Data Sheet

*AR-MVB Ultra Rapid is a two component vapor barrier coating designed to be a faster version - of our standard AR MVB & our AR-MVB FC. AR MVB Ultra Rapid is used as a primer as well - as a binder resin for Flake. AR - MVB Ultra Rapid will control moisture vapor emission rates up to 25 lb. /24 hr. /1000 square feet all while providing excellent physical and chemical resistance. This coating meets LEED standards.*

### Uses:

AR- MVB Ultra Rapid is formulated as a high solids system for classrooms, laboratories, mechanical rooms, areas of light manufacturing, where cleanliness and easy maintenance are required.

### Advantages:

- Solvent-free, low VOC content  
100% solids
- Rapid low temp cure
- High-Gloss, Blush-Free Films
- Superior water resistance
- Good chemical and physical resistance
- Easy to clean

## Application Data

<u>Mix Ratio</u>	<u>2A:1B</u>
<u>Packing</u>	<u>3-gal kit</u>
<u>Application temp.</u>	<u>4 C° - 28 C°</u>
<u>Pot Life</u>	<u>15 mins</u>

## Cure Time

<u>Working time</u>	<u>20-25 min</u>
<u>Set Time</u>	<u>1 1/2 hours</u>
<u>Recoat Time</u>	<u>2-24 hours</u>
<u>Full Cure</u>	<u>3 days</u>
<u>Light Foot Traffic</u>	<u>3-5 hours</u>
<u>Suggested Coats</u>	<u>1-2</u>

## Surface Preparation

Surface must be clean, sound and dry. Prior to coating a floor all trowel marks and surface imperfections must be removed to produce a smooth & uniform surface. Proper surface preparation is critical to ensure an adequate chemical bond to substrate. Substrate must be dry and free of all wax, grease, oils, fats, soil, contaminants, loose or foreign matter and laitance. Concrete should be cleaned and prepared using a shot blast machine or adequate grinding equipment to achieve a CSP-3 to CSP-4 profile as per ICRI guidelines. Compressive strength of concrete should be at least 3,500 psi (24 Mpa) @ 28 days and at least 215 psi (1.5 Mpa) in tension at time of product application.

### Technical Properties

ASTM D-635 – Flammability Self Extinguishing  
ASTM D-638 - Tensile Strength 5550psi  
ASTM D-638 - Tensile Elongation %: 10-15%  
ASTM D-695 - Compressive Strength:  
@ 24 hours: 7500 @7 days: 9800  
ASTM C-722 - Monolithic Surfacing: PASS  
ASTM D-2794 - Impact Resistance: PASS  
ASTM D-4060 - Abrasion Resistance 100 mg loss  
ASTM D-4366 - Shore D 80-90  
Vapor Permeance@16 MILS 0.71 g/(m<sup>2</sup>d)  
ASTM E96 US Perm 0.06  
  
MVER/RH@ 6 MIL Thickness ASTM F 186  
18lb/24hr/1000 sq feet

#### PART A:

VOC's: Zero  
Toxicity: Harmful if swallowed  
Flammable: Nonflammable  
Color: Clear  
Viscosity: 900-1100 cps

#### PART B:

VOC's: Zero  
Toxicity: Harmful if swallowed  
Flammable: Nonflammable  
Color: Clear  
Viscosity: 200-450 cps

## Mixing

AR - MVB FC is supplied in factory proportioned quantities, greatly reducing the risk of applicator error during mixing. Step 1 - Mechanically premix PART A (resin) with an appropriate slow speed drill equipped with a Jiffy Mixer, for 1 minute. Step 2 - Slowly empty entire content of PART B into container holding PART A and continue to mix slowly for 3 minutes until uniform consistency in texture and color is achieved. Avoid unnecessary entrapment of air during mixing. Make sure to scrape walls and bottom of container with straight edged trowel at least once to ensure homogeneous mix. Make sure to empty ALL contents of PART B into PART A to avoid system weakening or incomplete curing. **DO NOT MIX MORE MATERIAL THAN CAN BE APPLIED WITHIN WORKING TIME LIMITS.**

## Application

**APPLICATION** AR - MVB Ultra Rapid should be applied at ambient and surface temperatures between 33- 90°F and humidity below 80%. AR MVB Ultra Rapid is applied with a rubber squeegee and back rolled with a 10mm lint-free nap roller (on smooth surfaces) to remove squeegee lines and smooth out coating. Additional coats may be applied when surface is tack-free (< 2 hours). Do not exceed first 24 post-application hours for recoating. By exceeding this 24 hour recoat time limit, the entire surface must be lightly sanded to achieve desired profile for a proper mechanical bond. Clean up all dust and debris created by aforementioned sanding prior to applying subsequent coat.

**CURING** AR - MVB Ultra Rapid is tack-free in less than 2 hours at temperatures as low as 60 F. Coated area may be put back into service after 5-12 hours. Curing is complete and full product characteristics are achieved after 3 days. Curing times dependent upon ambient & surface conditions.

**PRECAUTIONS & LIMITATIONS** Prior to application, measure and confirm Substrate Moisture Content, Ambient and Surface temperatures and Dew Point. This coating cannot be used against hydrostatic pressure. Substrate Moisture: Moisture within substrate must be  $\leq 4\%$  by mass as measured by a type of concrete moisture meter on mechanically prepared surface.

**Do not add thinners or solvents to mix. Do not add water. Dispose of waste materials in accordance with government regulations. The use of safety glasses and protective gloves is required. In case of contact, flush areas with abundance of water for 20 minutes and seek medical assistance. Wash skin with soap and water.**

**Use only in well ventilated areas**

**AVOID CONDENSATION.** The substrate must be at least 3°C above Dew Point to reduce risk of condensation. Condensation may lead to failure in adhesion. Avoid situations where substrate temperature is considerably lower than ambient temperature.

## FIRST AID

In case of contact with skin, wash thoroughly with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult with a doctor. For respiratory problems, transport victim to fresh air. Remove contaminated clothes and clean before reuse. Components A and B contain toxic ingredients. Prolonged contact of this product with the skin is susceptible to provoke an irritation. Avoid eye contact. Contact with may cause serious burns. Avoid breathing vapors release from this product. This product is a strong sensitizer. Wear safety glasses and chemical resistant gloves. A breathing apparatus filtering organic vapors approved by the NIOSH/MSHA is recommended. Predict suitable ventilation. Consult the material safety data sheet for further information.

## CLEAN UP/STORAGE

Store in clean dry area. Do not freeze. Dispose in accordance with all state local and federal laws. Clean-up tools and equipment with xylene.

## IMPORTANT NOTICE

The recommendations and information contained in this document are based on reliable test results according to AR. It is the responsibility of the user to validate the information therein and to test the product before using it. AR assumes no legal responsibility for the results obtained in such cases. AR assumes no legal responsibility for any direct, indirect, consequential, economic or any other damages except to replace the product or to reimbursement the purchase price, as set out in the purchase contract.

### **FOR PROFESSIONAL USE ONLY!!**

This data sheet provides typical properties for American Resin products. Before using this product, the user is advised and cautioned to make their own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. Please consult our SDS for further safety information.

