



ESTABLISHED 1935

TECHNICAL BULLETIN

VR-500

January 2009

VR-500 Series Air Dry Phenolic Coatings

GENERIC TYPE: Air drying phenolic.

S-240 Solvent

Approx. 6.5 lbs. /gal.

RECOMMENDED USAGE: HERESITE VR-500 air dry phenolic series coatings are specially formulated to permit application by brush, spray or roller. Some of their outstanding properties are: excellent durability, good adhesion, good film building characteristics and flexibility.

When thoroughly aged, they produce hard corrosion resistant films. Recommended as a heavy duty maintenance coating for exposures to splash, spillage and fumes.

Successful applications include: agricultural implements, chemical plants, canning factories, construction equipment, marine finishes, steel plants, sewage disposal plant, textile industry, underground and underwater service, and ventilating systems. The VR-514 brown coating is a primer-finish combination material, specially formulated for salt water service.

When finished product is going to be exposed to UV rays, one topcoat of Heresite UC-5500 polyurethane is recommended. Allow the VR-500 to dry 24-48 hours before applying the UC-5500 coating

CHEMICAL RESISTANCE GUIDE:

<u>EXPOSURE</u>	<u>SPLASH & SPILLAGE</u>	<u>FUMES</u>
Acids (dilute)	Good	Excellent
Alkalies (dilute)		Good
Solvents	Fair	Good
Inorganic Salts	Good	Excellent
Water	Good	Excellent

ORDERING INFORMATION:

Shipping Weight:

VR-500 Finish Avg. Wt. 9 lbs. /gal.

VR-500 Primer Avg. Wt. 10 lbs. /gal.

(depends on color)

Flashpoint (T.C.C):

VR-500 101°F (38°C)

S-240 Solvent 101°F (38°C)

S-440 Solvent 62°F (17°C)

PHYSICAL DATA: (depends on color)

Solids by wt. Approx. 59% (finish)

Solids by vol. Approx. 46% (finish)

Solids by wt. Approx. 67% (primer)

Solids by vol. Approx. 48% (primer)

Pot life: N/A

Shelf life: 2 years @ 70°F (21°C)

VISCOSITY: (depends on color)

Finish: 56-96 K.U. (Krebs Units)

Primer: 88-98 K.U. (Krebs Units)

TEMPERATURE LIMITATION:

HERESITE VR-500 accepts dry heat temperatures up to 200°F (93°C)

COLORS

VR-500 Clear

VR-502 Black

VR-504 Brown

VR-506 Gray

VR-508 Ivory

VR-509 Machine Gray

(Other Colors Available On Special Order)

COVERAGE: Theoretical coverage - 737 sq. ft per gal. at 1 mil. Recommended total dry film thickness is 4 to 6 in a 2 to 3 coat system. (At 5 mils DFT average coverage would be 118 sq. ft. per gallon). This includes a 20% loss factor.

APPLICATION INSTRUCTIONS

These instructions are not intended to show product recommendations for specific service. They are issued as an aid in determining correct surface preparation, mixing instructions and application. It is assumed that the proper product recommendations have been made. These instructions should be followed closely to obtain the maximum service from the materials.

CAUTION: CONTAINS FLAMMABLE SOLVENTS. KEEP AWAY FROM SPARKS AND OPEN FLAMES. IN CONFINED AREAS WORKMEN MUST WEAR FRESH AIR LINE RESPIRATORS. HYPERSENSITIVE PERSONS SHOULD WEAR GLOVES OR USE PROTECTIVE CREAM. ALL ELECTRICAL EQUIPMENT AND INSTALLATIONS SHOULD BE MADE AND GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. IN AREAS WHERE EXPLOSION HAZARDS EXIST, WORKMEN SHOULD BE REQUIRED TO USE NONFERROUS TOOLS AND TO WEAR CONDUCTIVE AND NONSPARKING SHOES.

SURFACE PREPARATION: Remove all oil, grease from the surface with an appropriate solvent, such as Heresite S-330.

STEEL: (NON-IMMERSION) a commercial blast is acceptable in accordance with NACE #3 or SSPC-SP-6 specifications. Surface profile or anchor pattern shall be 20-25% of the recommended dry film thickness.

CONCRETE: (NON-IMMERSION) Remove protrusions by stoning, sanding or grinding. Concrete must be cured at least 28 days @ 70°F (21°C) and 50% humidity. Surfaces must be acid etched or abrasive blasted to remove laitance.

Non-Immersion - Surfaces must be acid-etched or abrasive blasted to remove laitance.

PRIMER: While VR-500 Series are self-priming on steel, four primers are available.

VR-502P, VR-504P, VR-506P are inhibitive primers to be used for maximum corrosion resistance. VR-508P is a primer for use in food service areas, on concrete or porous substrates.

On concrete or porous surfaces, two (2) coats of primer with two (2) coats of finish are recommended. The first coat shall be thinned one (1) part primer to one (1) part S-240 solvent.

THINNER: Recommend use of S-440 solvent for spray and S-240 solvent for brush or roller application.

THINNING: The amount of thinner required is dependent upon temperature, ventilation, humidity; spray equipment used and desired film thickness.

SPRAY: VR-500 series coatings are normally diluted 10 to 20% with S-440 solvent depending on equipment and operators desired viscosity

BRUSH OR ROLLER: (non-porous surfaces) HERESITE VR-500 series coatings may be applied without dilution. If desired, a small amount of S-240 solvent may be used.

APPLICATION:

1. Do not apply if temperature is less than 5°F (2°C) above dewpoint or if temperature is below 45°F (7°C).
2. All spray equipment shall be thoroughly cleaned and the hoses in particular shall be free of old paint film and other contaminants.
3. Use standard production type spray guns: May also be used with airless spray equipment.
4. Air supply shall be uncontaminated. Adjust air pressure to approx. 50 lbs. at the gun and provide 15-20% pot pressure. Adjust spray gun by first opening liquid valve and then adjust air valve to give approx. an 8"-12" fan, holding gun perpendicular to the surface at a distance of 12".
5. Apply a mist bonding pass.
6. Allow to flash off for several minutes, but not long enough to allow film to completely dry.
7. Apply 3-4 criss-cross multi-passes maintaining a wet appearing film approx. 3-4 mils wet film thickness equals approx. 1.5 mils dry film thickness.
8. Air dry with ventilation.

CURING SCHEDULE:

AIR DRY: Recoat in 24 hrs @ 70°F (21°C)

FULL CURE: 7 TO 14 DAYS

FORCE CURE: 20 mins. per coat @ 250°F (121°C).

CLEAN UP: Use HERESITE S-440 solvent.

STORAGE: Coating should not be stored longer than 24 months. Storage at 80°F (27°C) may shorten shelf life.

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