

ADVANCED PROTECTIVE COATING SYSTEM

VSC™ 1200-250 VOC TOPCOAT

with
Eastman TETRASHIELD™
protective resin systems

VSC™ 1200-250 VOC TOPCOAT (Parts A & B)

VSC 1200-250 VOC Topcoat is a two part (4:1) solvent based topcoat that is a hard, tough and extremely durable heavy duty industrial maintenance coating. The key is in the resin and Eastman Tetrashield™ protective resin systems create coatings that protect. Eastman has a long history of developing innovative polymers to solve the toughest problems and this latest innovation of Tetrashield continues this legacy. Valentus Specialty Chemicals and Eastman have invested thousands of research hours over the past four years to bring this remarkable technology to market.

PHYSICAL PROPERTIES (Mixed)

STANDARD COLORS	Gray, White, Black & ANSI Safety Colors
CUSTOM COLORS	Available upon request
FINISH	High Gloss
TACK FREE TIME	3-3 ½ hours
%SOLIDS BY WEIGHT	77
%SOLIDS BY VOLUME	64
COVERAGE (Theoretical)	295 sq. ft./gal @3.5 mils DFT, assumes no Loss
RECOMMENDED THICKNESS	3-4 mils dry (4-6 mils wet)
VISCOSITY	73 Ku
WORKABLE POT LIFE	4 hours at 77°F
SAG RESISTANCE	10+ mils
RECOAT TIME	1-5 hours
COATING VOC	1.8# per gl. (221 gms./l.)
FLASHPOINT	80.6°F
FLAMMABILITY CLASS	Flammable IC

Advantages:

- Exceptional adhesion
- Excellent long term protection when applied over VSC 1100 Primer
- Excellent resistance to acids, bases, organic solvents & hydraulic fluids
- Consistent film build and ease of application
- Cure window that gets assets back in service quicker

PRODUCT DESCRIPTION:

Premium performance high solids, 250 VOC two component gloss urethane topcoat

RECOMMENDED USES:

For use over properly prepared and primed steel, galvanized, aluminum, and poured concrete walls and flooring. Can be used over most previously primed and top coated substrates with minimal preparation.

Application over aged silicone alkyd systems is not recommended without total removal down to white metal.

Recommended for use on interior & exterior structural steel, steel piping, storage tank exteriors, bridges, metal buildings, railings, conveyors, pumps & motors and other machinery.

Excellent performance in medium to heavy duty protective maintenance applications for most industrial & commercial environments.



PERFORMANCE DATA

Corrosion ASTM B117 Salt Fog Blasted steel

Film Build VSC1100	ASTM B117 rating	With VSC1200-250VOC topcoat (5 mil dry)
3.5-5 mil dry	Greater than 1400 hrs. no face blister, no face rust, less than 2mm scribe rust	Greater than 3000 hr. no face blister, no face rust, less than 3 mm scribe rust

Chemical resistance VSC 1100/1200-250 VOC at target film build, 7 day ambient cure, 7 day direct contact exposure

Material	Rating
Acid (sulfuric)	Excellent – no damage
Base (sodium hydroxide)	Excellent – no damage
Solvents	Good
Brake Fluid	Good (some softening)
Hydraulic Fluid	Excellent
Water*	Excellent
Salt water*	Excellent

*Not recommended for immersion

Weathering: VSC 1100/1200-250 VOC at target film build, 7 day ambient cure 60 degree gloss retention

Method	Rating
Xenon ASTM 7869	4000 hrs. > 70% gloss retention
ASTM G154 cycle 1 (QUVA)	6000 hrs. > 70% gloss retention

Adhesion VSC 1100/1200-250 VOC at target film build, 7 day ambient cure

Method	Rating
Condensing Humidity ASTM D2247 at 60°C 7days blasted steel	Excellent
Field exposed Blasted steel	Excellent
Field exposed moderately prepared surface (Power wash/scraper over old paint)	Excellent



DIRECTIONS FOR USE

Recommended Primer: VSC 1100 Aluminum Epoxy high solids low VOC primer.

SURFACE PREPARATION:

Surfaces must be clean, dry, free from oil, grease, hydraulic fluids, silicone contamination, waxes, or any other residue. Use a solvent or commercial cleaner that does not leave a residue per SSPC-SP 1. Remove all mill scale, rust and any loose paint.

Ensure that previously painted surfaces have adequate adhesion, or remove. Smooth, slick surfaces should also be abraded/scuffed to ensure adequate adhesion. Spot prime or prime overall with VSC 1100 aluminum epoxy as required.

For environments which do not permit abrasive blasting, or over previously painted surfaces, hand tool cleaning per SSPC-SP2, power tool cleaning per SSPC-SP3, and/or high pressure water cleaning per SSPC-SP 12/NACE 5 WJ-4 is recommended.

New Steel & Iron: Abrasive blasting is preferred for enhanced performance. Blast to a commercial finish per SSPC-SP 6/NACE 3 to obtain a 1.5-3 mil profile. Prime overall with ZincGard 1000 inorganic zinc primer, followed by VSC 1100 aluminum epoxy as an intermediate coat. Refer to SSPC Guide 12.0 Painting over Zinc Rich Primers.

Galvanized Steel & Aluminum: Remove all surface contamination with solvent or commercial cleaner that does not leave a residue per SSPC-SP 1.

New galvanized should be sweep blasted or etched with a phosphoric acid solution, or coated with 0.5 dry mils of a phosphoric acid pre-treatment, followed by VSC 1100 aluminum epoxy primer. Old galvanized should be cleaned per SSPC-SP1, and lightly abraded per SSPC-SP 2 or SSPC-SP3, and primed with VSC 1100 aluminum epoxy.

Concrete: For new concrete, minimum cure is 28 days at 75 F and 50% RH or the equivalent. Abrasive blast or acid etch slick or glazed concrete, and remove laitance and form oils. Produce medium surface roughness per SSPC-SP13/NACE 6. Surface should be sealed with VSC 1100 aluminum epoxy.

For previously painted concrete, clean surface and remove all loose paint and debris with hand or power tools, and high pressure water cleaning. Spot prime bare concrete or seal overall as necessary with VSC 1100 aluminum epoxy.

APPLICATION:

MIXING: 4 parts VSC 1200-250 VOC Topcoat Part A

1 part VSC 1200-250 VOC Topcoat Part B

- Material is supplied in two containers as a unit, always mix a complete unit in the proportions supplied. Once the unit has been mixed, it must be used within the working pot life specified.
- Mix Part A thoroughly with low speed power agitation
- Then combine components, blend 1 Part B into 4 Parts A and thoroughly agitate the mixture with low speed power agitation.
- There is no induction period required, material is ready to use
- Do not apply material beyond the recommended pot life
- Do not mix previously catalyzed material with fresh material
- DO NOT MIX PARTIAL KITS - ONLY USE ONE & FIVE GALLON KITS AS SUPPLIED

METHOD OF APPLICATION: Air, Airless or Air Assisted Airless Spray, Brush or Roller

Brush or Roller: No thinner is necessary throughout the workable pot life window. Use a natural bristle brush or medium nap roller with a solvent resistant fibers & core. Work coating into all gaps and crevices. Apply wet and avoid excessive brushing or re-rolling.

Airless or Air Assisted Airless: No thinner is necessary throughout the workable pot life window. An airless pump equivalent to Graco Bulldog 30:1 ratio at 1900-2100 psi is recommended, with a 60 mesh in line filter. Use .013" to .0315" spray tip. Good results have also been achieved with a Graco 60:1 Bulldog pump at 45 psi, using a 517-519 tip. A Graco air assisted 30:1 pump or equivalent 1900 - 2300 psi, and 65 psi atomizing pressure is recommended, using a 311 reversible tip. **Optimum results have been achieved using a .017" tip at 2600 psi with a 3/8" ID hose and no thinning.**

Conventional Air: A small amount of thinning may be required for good atomization. If necessary, use only VSC 8100 Thinner at 2-3% by volume maximum. Industrial sprayers such as DeVilbiss MBC or JGA and Binks 18 or 62, fitted with a double regulated pressure pot, 3/8" ID minimum material hose and a .070" - .086" ID fluid tip and matching air cap, are recommended.

CLEANUP & PROLONGED WORK STOPPAGES: Do not allow material to remain in hoses at the end of a job, or during prolonged work stoppages.

Thoroughly flush & clean all equipment immediately after use with Acetone or MEK. Any mixed topcoat should not be re-used after its workable pot life.

All excess material and empty containers should be disposed of in accordance with appropriate local, state and federal regulations.

SHELF LIFE: 2 years from date of manufacture unopened at 77°F

CAUTION: For industrial use only. Read and follow all caution statements on this product data sheet, and on the Material Safety Data sheet for VSC 1200-250 VOC 2K Urethane Topcoat

HEALTH & SAFETY: This is a Flammable IC material. Use explosion proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used.

In confined spaces (or when spraying) use a chemical respirator with organic vapor cartridge and full facepiece.

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