INSULATING COATING	TECHNICAL DATA	RO-51

INTERIOR & EXTERIOR INSULATING 100% ORGANIC PAINT PCG1900-XX

DESCRIPTION AND USES

The VerdaShield 1900 is a ultra high solids 100% organic bio-based interior and exterior finish. It is a single component, high solids coating that contains Insul-Aggregate, for use in moderate to severe environments. It has a 97% reflectivity rate. It is also anti-microbial and anti-viral, utilizing the pH level of the limestone pigments to combat the growth of bacteria and viral organisms .

It is specifically designed for application on primed and cleaned substrates, including steel, galvanized metal, plastic, fiberglass, drywall, masonry and many other surfaces. When applied as directed, it will provide the owner with an insulating value equal to that of R6 insulation, and incrementally higher values, when applied in two coats.

The VerdaShield System complies with USDA FSIS regulatory sanitation performance standards for food establishment facilities. This coating is impervious to moisture and easily cleaned and sanitized.

VerdaShield 1900 is 100% bio-degradable, and come in a variety of sheens..

PRODUCTS

TINT BASES:

1907405	1907375	Milestone
1908421	1908381	Deep
1909408	1909388	Light

COMPANION PRODUCTS (Primers)

RECOMMENDED PRIMERS

VerdaShield 1901 Bonding Epoxy Primer

COMPANION PRODUCTS (Topcoats)

Consult with your distributor.

PRODUCT APPLICATION

SURFACE PREPARATION

ALL SURFACES: Remove all dirt, grease, oil, salt and chemical contaminants by washing the surface with Krud Kutter® Original Cleaner Degreaser or other suitable cleaner. Rinse with fresh water and allow to dry.

STEEL: Hand tool (SSPC-SP-2) or power tool (SSPC-SP-3) clean to remove loose rust, scale, and deteriorated previous coatings to obtain a sound rusted surface. For optimum corrosion resistance, abrasive blast to commercial grade SSPC-SP-6, with a blast profile of 1-2 mils (25-50 µ).

PRODUCT APPLICATION (cont.)

SURFACE PREPARATION

STEEL: Abrasive blast clean or clean to a minimum SSPC-SP-2 All weld spatter must be removed along wield seams, rough welds should be ground smooth, and all sharp edges should be ground to a smooth radius.

PREVIOUSLY COATED: Previously coated surfaces must be sound and in good condition. Smooth, hard, or glossy finishes should be scarified by sanding or sweep blasting to create a surface profile. The VerdaShield 1900 is compatible with most coatings, but a test patch is suggested.

GALVANIZED METAL: Remove oil, dirt, grease and other chemical deposits with a suitable cleaner. Remove loose rust, white rust or deteriorated old coatings by hand or power tool cleaning or brush off blasting. Rinse thoroughly with fresh water and allow to fully dry.

CONCRETE OR MASONRY: New concrete or masonry must cure 30 days before coating. Any concrete surface must be protected from moisture transmission from uncoated areas. Remove all loose, unsound concrete.

APPLICATION

Airless spray is the preferred method of application. However, brush, roller, or air-atomized spray may also be used. Refer to table for thinning recommendations. For proper performance, a dry film thickness of 5-8 mils per coat is required. Excessive brushing or rolling may reduce film thickness. Apply a second coat if necessary to achieve the recommended film thickness.

When application temperatures are between 40-60°F (5-15°C) and when the surface temperature is at least 5°F (3°C) above the dew point, use the 9103402 Low Temperature Activator. Do not apply the material if the temperature is expected to fall below 40°F in the first 24 hours of cure. At 40°F, full cure will be achieved in 7 days

PRODUCT APPLICATION (cont.)

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PRODUCT APPLICATION (cont.)

EQUIPMENT RECOMMENDATIONS

(Comparable equipment also suitable.)

BRUSH: Use a good quality natural or synthetic bristle brush.

ROLLER: Use a good quality lamb's wool or synthetic fiber (3/8-1/2"nap).

AIR-ATOMIZED SPRAY:

Method	Fluid Tip	Fluid Rate	Atomization Pressure
Pressure	0.055-0.070	10-16 oz./min.	25-60 psi
Siphon	0.055-0.070	—	25-60 psi
HVLP	0.043-0.070	8-10 oz./min.	10 psi (at tip)

AIRLESS SPRAY:

Fluid Pressure	Fluid Tip	Filter Mesh
1,800-3,000 psi	0.013-0.017	100

THINNING

Thinning is normally not required, except for air-atomized spray. For air-atomized spray application, thin only up to 10% by volume with water after the components have been mixed.

MIXING

Add water as needed to achieve proper viscosity.

CLEAN-UP

Water

SHELF LIFE

Two Years

PERFORMANCE CHARACTERISTICS

SYSTEM TESTED

Topcoat: Organic Industrial Coating

PENCIL HARDNESS

METHOD: ASTM D3363
RESULT: B (7 days), 2H (30 days)

CONICAL FLEXIBILITY

METHOD: ASTM D522
RESULT: >32%

CYCLIC PROHESION

Rating 1-10, 10=best

METHOD: ASTM D5894, 500 hours
RESULT: 10 ASTM D714 for blistering
RESULT: 10 ASTM D1654 for corrosion

IMPACT RESISTANCE (direct)

METHOD: ASTM D2794
RESULT: 110 in. lbs.

TABER ABRASION

METHOD: ASTM D4060 CS-17 wheel, 500 g. load, 500 cycles
RESULT: 125 mg loss

GLOSS

METHOD: ASTM D4587
RESULT: 50%

PHYSICAL PROPERTIES

		1900 DTM Coating						
Resin Type		Bio-Based						
Pigment		Limestone						
Solvents		Water						
Weight[6]	**Per Gallon**	12.6 lbs.						
	Per Liter							
Solids[6]	**By Weight**	79%						
	By Volume	65%						
Volatile Organic Compounds[6]		0.0 lbs./gal.						
Mixing Ratio		None						
Recommended Dry Film Thickness (DFT) Per Coat		4.0 Mils						
Wet Film to Achieve DFT (unthinned material)		6.0 Mils						
Theoretical Coverage at 5 mil DFT		208 sq.ft./gal.						
Practical Coverage at Recommended DFT (assumes 15% material loss)		177 sq.ft./gal						
Induction Period		None required						
Pot Life[7]	**Gallon**	None	None					
	5 Gallons	None	None					
Dry Times at 50% Relative Humidity	**Tack-free**	.5/Hr. at 80F	None					
	Handle	1/Hr at 80F	None					
	Recoat	1/Hr. at 80F	None					
Dry Heat Resistance		300°F (149°C), Color may shift above 150°F (66°C)						
Maximum Immersion Temperature		NA						
Shelf Life		3 Years						
Safety Information		For additional information, see SDS						