



CeramycShield™ Product Information Sheet



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CeramycShield™

Water Based Ceramic Surface Treatment

Part A: Liquefier

Part B: Ceramic Powder

Part C: Densifier

Haydale's CeramycShield™ is a concrete surface coating that uses nano-Alumina and Zirconia Silicates to renew and preserve concrete surfaces. Inhibits attack from water, chlorides, carbonation, biological infection, and sulfates that are the main causes of concrete decay. A LEED 4.2 compliant material that offers superior performance while maintaining ease of application properties.

- Penetrating Chemical Adhesion
- Will Not Chalk, Peel, or Disbond
- UV Immune
- Biologically Impervious

Product Characteristics

Finish:	Matte
Colour:	Light Gray, Tan
Weight Solids:	80% ± 2%
VOC:	<0.408 g/L; 0.003 lb/gal

Recommended Spreading Rate per Coat:

	Minimum	Maximum
Wet/Dry MILS (microns)*	6.0 (150)	8.0 (200)
~Coverage sqft/gal	200	267

*Coating does not shrink during drying

NOTE: Only a single coat is needed to achieve properties

Drying Schedule @ 7 mils thick:

	55°F	70°F 50% RH	85°F
To Touch:	1 hour	45 minutes	30 minutes
To Topcoat:			
minimum:	24 hours		
maximum:	N/A		
Initial Cure:	24 hours		
Full Cure:	7 days		
Foot Traffic:	6 hours		
Heavy Traffic:	48 hours		

Drying time is temperature, humidity, and film thickness dependent.

Pot Life:	>1 hour @ 70°F
Shelf Life:	Indefinite, Store indoors at <100°F
Flash Point:	None (water based)
Clean Up:	Water

Recommended Uses

CeramycShield™ protects assets:

- Agriculture & Dairy
- Animal Husbandry
- Bridges (decks, beams, piers/abutments)
- Precast Products (slabs, pipes)
- Cinderblock Walls
- Commercial & Industrial floors
- Concrete Roadways, Runways, Pathways
- Dams
- Food Storage & Processing
- Greenhouses (walls and floors)
- Kill Houses
- Loading Docks
- Parking garages (deck and walls)
- Retaining and Sound Barrier Walls
- Seawalls & Wharfs
- Storm Drains
- Tanks
- Tunnels
- Wastewater Treatment
- Water Treatment

Performance Characteristics

Substrate: Concrete
Surface Preparation: Clean

Physical Testing	
Dry Film Thickness	6-8 MILS (150-200 Microns)
Adhesion (Direct Pull-Off) [ASTM D4541]	>1000 PSI (concrete failed)
Thermal Expansion	Concrete Compatible
Thermal Cycling [ASTM D6944]	No Checking Occurred No Cracking Occurred No Blistering Occurred
MOHs Hardness	>9
Hardness, Shore D [ASTM D2240]	90.0 ± 5.0
Taber Abrasion [ASTM D4060] CS-10 @ 1,000g Load, per 1,000 Cycles	17 Wear Index (Excellent Hardness)
UVA/B 370nmλ UVC 200nmλ	No Chalking Occurred No Cracking Occurred No Delamination Occurred
High Temperature Service	2000°F (No Degradation)
Fire Rating [ASTM E84 - 15b]	Zero (0) Flame Spread
Smoke Generation [ASTM E84 - 15b]	Zero (0) Smoke

Recommended Systems

	MILS	(Microns)
Concrete Walls: 1 ct. CeramycShield	6.0-8.0	(150-200)
Concrete Floors: 1 ct. CeramycShield 1 ct. QuartzSeal	6.0-8.0 1.0-2.0	(150-200) (50-100)
Anti-Graffiti: 1 ct. CeramycShield 1 ct. Vitrium	6.0-8.0 1.0-2.0	(150-200) (50-100)

Surface Preparation

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion. Refer to CeramycShield Application Specification for detailed surface preparation information.

Do not use hydrocarbon solvents for cleaning.

Minimum recommended surface preparation:

Concrete & Masonry: SSPC-SP13/NACE 6, or ICRI No. 310.2R, CSP1-3

Application Conditions

Temperature: 55°F minimum, 85°F maximum
(air, surface, and material)
At least 5°F above dew point

Relative humidity: 30% minimum, 85% maximum



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Ordering Information

Packaging: 1 gallon and 4 gallon kits
Weight: 17 ± 0.2 lb/gallon

Safety Precautions

Refer to the Safety Data Sheets before use.

Warranty

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