

Creating Material Change



Vitrium™ Product Information Sheet



Innovation underpins everything we do
www.haydale.com  HaydaleGraphene

Vitrium™

Penetrating Chemically Bonded Sealant

Haydale's CeramycGuard™ with Vitrium™ creates a complete moisture barrier, preventing water/ waterborne chemical pollutants and other corrosive elements from entering the concrete. This sealer prevents staining and does not allow for paint, marker, or oil to permanently stick to the surface, allowing for easy cleaning. Vitrium™ uses an EPA-exempt green solvent that offers superior performance while maintaining ease of application properties.

- Zero-Porosity
- Will Not Chalk, Peel, or Dis-bond
- UV Resistant
- Graffiti-Barrier
- Adhesion Promoter for Topcoats

Product Characteristics

Finish: Satin or Gloss
 Coloyr: Clear
 Weight Solids: 20% ± 2%
 VOC: 780 g/L; 6.5 lbs/gal

Recommended Spreading Rate per Coat:

	Minimum	Maximum
Wet/Dry MILS (microns)	1.0 (25)	2.0 (50)
Coverage sqft/gal	~400	~800

Drying Schedule @ 1 mils thick:

	55°F	70°F	85°F
To Touch:	2 hours	2 hours	2 hours
To Topcoat:		50% RH	
minimum:	2 hours		
Initial Cure:	24 hours		
Full Cure:	7 days		

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

Pot Life: 1 year from manufacture
 Shelf Life: 1 year from manufacture, Store indoors at <100°F
 Flash Point: 14°F
 Clean Up: Clean tools and flush equipment with acetone immediately after use.

Recommended Uses

CeramycGuard™ protects assets:

- Agriculture & Dairy
- Animal Husbandry
- Precast Products (slabs, pipes)
- Cinderblock Walls
- Concrete Roadways, Runways, Pathways
- Food Storage & Processing
- Greenhouses (walls and floors)
- Kill Houses
- Parking garages (deck and walls)
- Retaining and Sound Barrier Walls
- Seawalls & Wharfs
- Storm Drains
- Tanks
- Tunnels
- Wastewater Treatment
- Water Treatment

Physical Testing

Substrate: Concrete
 Surface Preparation: Clean

Physical Testing	
Dry Film Thickness	7-9 MILS (175-225 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	14 Wear Index (Excellent Hardness)
UVA/B 370nmλ	No Chalking Occurred No Cracking Occurred No Delamination Occurred
High Temperature Service	500°F (No Degradation)
Fire Rating [ASTM E84 - 15b]	Zero (0) Flame Spread
Smoke Generation [ASTM E84 - 15b]	Zero (0) Smoke
Oxygen Barrier [ASTM F622]	Zero (0) Measureable Oxygen Transmission

Recommended Systems

	MILS	(Microns)
Concrete Walls:		
1 ct. CeramycGuard™	6.0-8.0	(150-200)
Concrete Floors:		
1 ct. CeramycGuard™	6.0-8.0	(150-200)
1 ct. QuartzSeal™	1.0-2.0	(50-100)
Anti-Graffiti:		
1 ct. CeramycGuard™	6.0-8.0	(150-200)
1 ct. Vitrium™	1.0-2.0	(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 CeramycGuard 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 pails
Weight: 8.0 ± 0.2 lb/gallon

Safety Precautions

Refer to the Safety Data Sheets before use.

Warranty

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