

Creating Material Change



QuartzSeal™ Product Information Sheet



Innovation underpins everything we do
www.haydale.com  HaydaleGraphene

QuartzSeal™

Penetrating Chemically Bonded Inorganic Sealant

Haydale's QuartzSeal™ creates a Near-Zero Porosity over our CeramycGuard™ that further inhibits water/waterborne chemical pollutants and other corrosive elements from entering the concrete while still remaining breathable. QuartzSeal™ also imparts improved Stain Resistance by preventing the accumulation of dust, dirt, and stains. A LEED 4.2 compliant material that offers superior performance while maintaining ease of application properties.

- Penetrating Chemical Adhesion
- Breathable
- Will Not Chalk, Peel, or Disbond
- UV Immune
- Improved Chemical Resistance
- Improved Stain Resistance

Product Characteristics

Finish:	Matte
Colour:	Clear
Weight Solids:	10% ± 2%
VOC:	0.0 g/L; 0.0 lb/gal

Recommended Spreading Rate per Coat:

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

NOTE: Only a single coat is needed to achieve properties.

Drying Schedule @ 7 mils thick:

	55°F	70°F	85°F
		50% RH	
		30 minutes	10 minutes
To Touch:	1 hour		
To Topcoat:	N/A		
Initial Cure:	24 hours		
Full Cure:	7 days		
Foot Traffic:	8 hours		
Heavy Traffic:	48 hours		

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

Pot Life:	Indefinite
Shelf Life:	Indefinite, Store indoors at 32°F
Flash Point:	None (water based)
Clean Up:	Water

Recommended Uses

CeramycGuard™ 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	No Chalking Occurred No Cracking Occurred No Delamination Occurred
Water Penetration [ASTM E514]	None
High Temperature Service	500°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. CeramycGuard™	6.0-8.0	(150-200)
Concrete Floors: 1 ct. CeramycGuard™ 1 ct. QuartzSeal™	6.0-8.0 1.0-2.0	(150-200) (50-100)
Anti-Graffiti: 1 ct. CeramycGuard™ 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 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



Contact us: T: +1 864 877 0123 E: info@haydale.com



Contact us: T: +1 864 877 0123 E: info@haydale.com

Ordering Information

Packaging: 1 gallon pails
Weight: 8.3 ± 0.2 lb/gallon

Safety Precautions

Refer to the Safety Data Sheets before use.

Warranty

Haydale Group warrants (i) its title to the product, (ii) that the quality of the product conforms to Haydales's standards at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product.

THESE ARE THE ONLY WARRANTIES THAT HAYDALE MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY HAYDALE.

Any claim under this warranty must be made by Buyer to Haydale in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify Haydale of such non-conformance as required herein shall bar Buyer from recovery under this warranty. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Haydale. Haydale is not responsible for any consequential damages.

The content supplied in this product information sheet ("Information") supersedes all previous versions supplied. Version 2, April 2021.

The Information should be used solely as guidance for the safe handling, storage, processing and/or use of the Product and is only typical of the methods described. The Haydale Group (Haydale Group means Haydale Limited, as a subsidiary of Haydale Graphene Industries plc., and any subsidiary or holding company from time to time and any subsidiary from time to time of any holding company of Haydale Limited) gives no express or implied warranty or guarantee or representation as to the behaviour of the Product described herein during any handling or storage or processing or use of the Product. To the extent permissible by law the Haydale Group shall under no circumstances whatever be liable whether in contract, tort (including negligence), breach of statutory duty, or otherwise, for any damage, including loss of profit, or any indirect or consequential loss arising under or in connection with any handling or storage or processing or use of the Product.



Contact us: T: +1 864 877 0123 E: info@haydale.com