



H&C® HYDRO-DEFEND® SUPER V™ WATER REPELLENT



PRODUCT DESCRIPTION

H&C® HYDRO-DEFEND® SUPER V™ Water Repellent is a self-emulsifying, siloxane concentrate which when mixed with water and agitated, forms a micro-emulsion suitable for application to above grade, dense or porous masonry surfaces.

FEATURES & BENEFITS

- Provides excellent water repellency.
- Permeable to water vapor.
- Can be stained over
- Suitable for application to both dry and slightly damp surfaces.
- Exhibits superior resistance to water, acid rain, efflorescence, alkalis, acids ultra-violet light and staining.
- Will react into a silicone resin upon evaporation of its solvent
- Can custom blend for specific requirements

RECOMMENDED USES

H&C® HYDRO-DEFEND® SUPER V™ WATER REPELLENT can be recommended for most masonry surfaces including: concrete walls, split faced block*, concrete block, mortar, precast & poured concrete, brick (clay or cement), highways & bridge decks, stucco, fluted block, cement floors and roof tile.

*Lightweight Split Faced may require a film forming product due to its extreme porosity

ALTERNATE USES

For a color/seal system on extremely porous substrates, apply a flood coat of Super V then 2 coats of H&C COLORTOP Solvent-Based Solid Color Concrete Sealer.

COVERAGE RATES

Substrate	sq ft/gal
Smooth precast concrete	200-300
Porous concrete	150-200
**Split Face Block	50-75
Fluted block	25-50
Concrete Block	75-125
Brick (clay)	100-150
Steel Trowelled Concrete	150-200

When using H&C HYDRO-DEFEND SUPER V at least two flood coats are required. Because the flood method is recommended, surface texture will determine actual coverage.

** Lightweight Split Faced block may require a film-forming product due to its extreme porosity.

JOBSITE TEST SECTION

LIMITATIONS

For use on BARE surfaces only. Not for use on marble, limestone, or other forms of calcium carbonate. Do not use below grade. SUPER V is not recommended for topcoating over film-forming paints, stains, or sealers.

SURFACE PREPARATION

Horizontal Applications: Allow new concrete to cure at least 28 days. Concrete surfaces should be able to absorb water. To test absorption, spray various sections of the surface to be stained with water. If the water does not absorb rapidly, then acid etch the surface using H&C® CONCRETEREADY® Etching Solution, following label instructions. After proper etching, the surface should feel like 120-grit sandpaper. If not, then etch again. Mechanical abrasion methods may be necessary to achieve proper profile. Do not apply the stain until all surfaces are porous. Allow all surfaces to dry at least 24 hours before staining. Prepared concrete must have a pH of 6 to 10. For surface preparation, refer to SSPC-SP13/NACE 6 or ICRI No.310.2.

Vertical Applications: All concrete must be porous, clean, dry and free of grease, oil and other contaminants. To spot clean, use H&C CONCRETEREADY Cleaner Degreaser, following label directions. If mold, mildew, or fungus is present, kill and remove with a solution of 1 cup household bleach to 1 gallon of water. In order to ensure adhesion of H&C HYDRO-DEFEND Water Repellents all paint or coating must be removed from the surface by mechanical abrasion. For surface preparation, refer to SSPC-SP13/NACE 6 or ICRI No.310.2.

Repair: For the best waterproofing protection on vertical and horizontal concrete and masonry surfaces, use H&C CONCRETEREADY Quick Patch and Repair to address spalled concrete. Please note that patching compounds will generally be visible through clear coatings.

NOTE: Back rolling is recommended after spraying.

TOOLS REQUIRED

- Synthetic roller (3/8- to 1/2-inch nap)
- Pump up sprayer (pressure 5 to 15 psi; tip Cone)
 - *Backrolling recommended after spraying
- Eye Protection
- Respiratory Protection
- Gloves

APPLICATION INSTRUCTIONS

- Apply under dry conditions only. Do not apply if rain is expected within 4-5 hours following application.
- Air and surface temperature should be between 50°F and below 90° for 24 hours following application.
- Do not overapply
- Stir thoroughly before and during application
- Do not reduce after washing surface or after rain before applying H&C HYDRO-DEFEND SUPER V Water Repellents.

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Add contents of 1/2 gallon container of concentrate into 4 1/2 gallons of clean, room temperature water, in a plastic five gallon pail. Stir thoroughly. If less material is required for the immediate job, mix a ratio of one part repellent concentrate to nine parts water. **MIX ONLY AS MUCH MATERIAL AS CAN BE USED WITHIN 24 HOURS!** Over-diluting will drastically reduce effectiveness of water repellent.

How to Apply:

Stir thoroughly before and during application. Do not shake or whip air into sealer, and do not reduce. Apply with a brush, roller, or pump up sprayer. When applying by roller, maintain a wet edge, going in the same direction during the entire application. The best results are achieved when working with low spraying pressures so the impregnating solution is applied in the form of droplets rather than a mist. Use the flood method. Vertical surfaces must be saturated, or “flooded”, allowing the material to run down 8 to 10 inches. Always work from the bottom up. Horizontal surfaces can

be applied by the above methods or with conventional roller or brush providing enough material is used to allow it to stand for a few seconds before completely penetrating. **Interruption of Work:**

of Work:

Upon drying, treated surfaces appear identical to untreated surfaces. It is possible areas could remain untreated if work is interrupted. It is advisable to stop application on a corner joint or any other obvious marker so the applicator can begin where application had previously ceased.

Coats:

When using H&C HYDRO-DEFEND SUPER V at least two flood coats are required. Because the flood method is recommended, surface texture will determine actual coverage.

CLEANUP

Clean spills and splatter immediately with soap and warm water. Cleans hands and tools immediately after use with soap and warm water. Flush spray equipment after cleaning with mineral spirits to prevent rusting of the equipment. Follow manufacturers safety recommendations when using mineral spirits.

MAINTENANCE

Clean surfaces coated with H&C HYDRO-DEFEND SUPER V using a mixture of 3 parts water to 1 part H&C CONCRETEREADY Cleaner Degreaser.

PHYSICAL PROPERTIES

Physical Properties and Characteristics		
Property	Test Method	Value
Dry Time (@ 77°F, 50% RH)	Dry-to-touch	3 hours
	Recoat	24 hours
Vehicle Type		Waterborne siloxane
Flash Point		none
VOC (less exempt solvents)		315 g/L; 2.5 lb/gal
Volume Solids		10% ± 2%
Weight Solids		10% ± 2%
Weight per Gallon		8.3 lb
National Cooperative Highway Research Program, 244 REPORT, Series II Test		
Water-Vapor Transmission	Minimum Required	
Super V**	100%	138.3%
Reduction in Chloride Ion Intrusion	Minimum Required	
Super V**	75%	91.3%
Reduction in Water Absorption	Minimum Required	
Super V**	75%	81.8%
Cal. DOT ASTM 33960 VOC	Maximum Allowed	
Super V**		400
Water Absorption	24 hours, maximum allowed	
Freeze Thaw		1%
Super V**		0.65%
Super V**	200 cycle minutes	433

*Two coats at 125 sq ft/gal per coat

**Two coats at 100 sq ft/gal per coat 24 hours, maximum allowed

ACID AND ALKALI RESISTANCE TESTS

Each was allowed to react for 24 hours under a watch glass, washed with water, allowed to recover for 30 minutes then observed.

Alkali:

2% NaOH.....No Effect
5% Tide.....No Effect
2% Ivory Flakes.....No Effect

Acid:

5% Citric Acid.....No Effect
100% Milk.....No Effect
5% HCL.....No Effect
5% Phosphoric Acid.....No Effect

ORDERING INFORMATION

Clear	Part Number/SMIS
1/2 Gallon Kit	50.145001-15/ 6509-22966

TECHNICAL SERVICES

The information and recommendations set forth in this product data sheet are based on tests conducted by or on behalf of H&C Products Group and The Sherwin-Williams® Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your H&C or Sherwin-Williams representative to obtain the most recent product data sheet.

For technical assistance, call 1-800-867-8246 or visit www.hcconcrete.com.

CAUTION

CAUTION contains ALIPHATIC HYDROCARBONS.

Contents are COMBUSTIBLE. Keep away from heat and open flame. VAPOR HARMFUL. Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, or wear respiratory protection (NIOSH approved) or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage.

FIRST AID: In case of eye contact, flush thoroughly with large amounts of water for 15 minutes and get medical attention. For skin contact, wash thoroughly with soap and water. In case of respiratory difficulty, provide fresh air and call physician. If swallowed do not induce vomiting. Call Poison Control Center, hospital emergency room, or physician immediately.

DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE.

Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.

LIMITED WARRANTY

Seller's and manufacturer's only obligations shall be to replace such quantity of product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising from the applicator's inability to use the product for his/her intended use. The user assumes all risk and liability.