ChemSeal™

Damp Proof Cement Based Coating for Concrete & Masonry

SPECIALTY CONSTRUCTION PRODUCTS

P R O D U C T D A T A

DESCRIPTION

ChemSeal, a Portland cement based coating, develops a highly durable, low maintenance, damp proof barrier that resists both positive and negative hydrostatic pressure. **ChemSeal** fills and seals the pores and voids in the surface imparting a strong durable uniform appearance. May be used above or below grade, interior or exterior applications, and comes in a variety of standard colors including foundation gray for applications below ground. When mixed with **ChemMasters' Cretelox**, a latex polymer modifier, optimum results are obtained.

ADVANTAGES

- Permanently damp proofs on negative and positive sides
- Allows vapor transmission
- UV resistant
- Will not peel, blister, or chip
- Solvent & odor free - Zero Volatile Organic Compounds (VOC)
- Heavily bodied to fill voids and cracks
- Provides a uniform decorative appearance
- Can be coated with **ChemMasters' ColorCoat** for architectural applications

USES

- Apply to concrete or masonry to damp proof and improve the appearance of any concrete or masonry surfaces
- Interior basement walls
- Exterior foundations walls
- Pools or brine tanks
- Exterior walls of block, brick, or concrete buildings
- Cisterns, septic tanks, or sewers
- Tunnel walls
- Light pedestrian horizontal surfaces
- Water treatment plants

Packaging		
ChemSeal 50 lb (22.7 kg)	56 / pallet	F3030.50
Foundation Gray	56 / pallet	F3030.50 FG
White	56/pallet	F3030. WW
Light Gray	56/pallet	F3030.50 LG
Colors	56/pallet	F3030.xx

Packaging continued		
Cretelox 1 gal (3.7L)	4/case	F3400.01
Cretelox 5 gal (18.9 L)	36/pallet	F3400.05
Cretelox 55 gal (207.9 L)	4/pallet	F3400.55

TECHNICAL DATA

Estimating Guide *		
Coat / bag	**ft² (m²)**	**Approx. mils of film coat**
First	225 (21)	30
Second	450 (42)	45

In higher hydrostatic pressure application > 15 psi or in negative side damp proofing conditions, the second coat should be applied at 225 ft² (21m²) per bag. At this rate the two coat system will be 60 mils thick.

Test Data	
ASTM C109 Compressive Strength 28 days Tensile Strength 7 days Tensile Strength 28 days	 5,000 psi (34.5 MPa) 225 psi (1.6 MPa) 400 psi (2.8 MPa)
ASTM C 67 Absorption	24 hrs < 3.25%
Shore D Hardness (TTP 0035) 21 Days	50
Wind Driven Rain Resistance Fed Spec TT-C-555-B Water Penetration Blister Density/Size	20 hours @ 150 mph None None
ASTM D822 Weatherometer 5,000 hours	 No deterioration
Freeze Thaw Resistance 100 cycles	No cracking or Deterioration
Salt Spray Resistance 500 hrs	0 - indicates no spall
Fungus Growth Fed Test 141 Method 6271	28 days none
ASTM C514 Water Permeance Extent of damp area Maximum leakage Leakage rate Permeance rating	 0% None None excellent

ChemMasters®
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DIRECTIONS

Surface Preparation: Apply **ChemSeal** to a clean structurally sound surface. Remove efflorescence, salt, deteriorated concrete or masonry, dirt, oils, waxes, form release agents, curing compounds, and paints. Eliminate mildew, mold, or fungus growth on the wall by cleaning with an EPA approved product and following those directions before applying **ChemSeal**.

Repair all cracks and voids. Grout around pipes and conduit with **ChemMasters' ChemPlug** hydraulic cement. If necessary, repoint joints at wall/slab intersections. To prevent leakage at joints chip the crack and apply a cove of **ChemMasters' ChemPlug**. Drill weep holes at the base of any wall with an active pressure leak to temporarily relieve water pressure. Weep holes may be plugged 48 hours after **ChemSeal** application.

Mixing: Each 50 lb bag of **ChemSeal** will require 6 to 8 quarts (5.7 to 7.5 L) of mixing liquid. The amount of mixing liquid used will vary depending on the consistency of the **ChemSeal** desired.

**** Mixing Liquid For Best Results:**

Standard applications : Use **Cretelox** acrylic admixture as part of the mixing liquid: 1 part **Cretelox** to 2 parts water.

Extreme Conditions: Cretelox can be used at 1:1 with water.

Cretelox improves the chemical impact, abrasion resistance, and increases the bond strength of **ChemSeal****

Pour half of the mixing liquid required for the batch into a clean empty mixing container and begin slow speed mixing with a drill and paddle. Do not entrain air. Slowly add **ChemSeal** to the mix. Add more mixing liquid as needed to bring the mix to a heavy pancake batter consistency.

Stop the mixer and allow the mixture to fatten for 10 minutes. Remix and if necessary add additional mixing liquid to achieve brushing consistency. Properly blended material should cling to a masonry brush without dripping.

Pot life is 60 minutes at 70°F (21°C). Higher temperatures and low humidity may significantly reduce pot life.

When making a trowel able mix, add 25 lbs (11kg) of clean silica sand to every 50 lbs (22.7 kg) bag of **ChemSeal**. Preblend the sand with each bag of **ChemSeal**. Maintain the recommended mixing liquid ratios of **Cretelox** and water needed based on the application.

GENERAL APPLICATION INSTRUCTIONS

Prior to applying **ChemSeal** fog spray the substrate with potable water until thoroughly wetted. On hot days, exterior applications may require repeated wetting. A dry surface will take the moisture away from **ChemSea**l and the surface will crack.

- Exterior vertical walls, marine aquarium, swimming pools, zoo tanks: use thinner coats
- **Application:** Apply with a mortar brush, trowel, or textured spray equipment. Scrub coat with proper mixture where needed to fill cracks and voids. Follow application rates for the first and second coat on page 1. Do not spread too thin. Trace mortar joints to insure they are completely filled. Finish brush strokes in one direction for uniform appearance. Avoid stopping finish coats in the middle of a wall to avoid lap marks. Work towards a natural break point such as a corner, column, or control joint.
- For the maximum damp proof durable surface apply a second coat.
- Negative side water pressure: use thicker coats
- Cure for 2 days before applying a second coat to reduce suction shadowing and obtain greater color uniformity.

STORAGE

Store unopened bags on a pallet in a cool dry area. Shelf life of properly stored material is 2 years from date of manufacture.

CAUTIONS:

- Do not apply if rain is expected within 24 hours or if temperature is > 90°F (32°C) < 40°F (4°C)
- Cure 10 days before immersion in water
- Do not apply to painted surfaces
- Some batch to batch color variations can be expected due to temperature, humidity, and water content

Precautions:

DANGER: Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure if inhaled. Precautionary Statements: Obtain special instruction before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/ vapors/spray. Wash hands and skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/ face protection.

Keep out of reach of children.
For professional use only

Review the current version of the Product Data and Safety Data Sheets available through **ChemMasters** at www.chemmasters.net or call Technical Service at 800-486-7866. Proper application is the responsibility of the user. ChemMasters can only make technical recommendations and cannot provide quality control on the jobsite.