



REMR MATERIAL DATA SHEET CM-SE-1.40 CONCRETE SEALER: DEEP SEAL

1. NAME

Deep Seal

2. MANUFACTURER

VEN-CHEM Co. Inc.
PO Box 3186
Santa Barbara, CA 93130
Telephone: 805-967-7600

3. DESCRIPTION

Deep Seal is a clear, penetrating, non-yellowing solution containing a high concentration of an organosilane in an aqueous alcoholic vehicle. The formulation contains no oil type silicones, parafins, vinyls, modified urethanes, nor acrylics in any form such as stearates or methacrylates.

4. USES

Deep Seal is a weather resistant sealer for substrate protection above and below grade. It penetrates and breathes, is not affected by ultraviolet light or freeze-thaw cycles, is resistant to hydrocarbons such as oil and grease, wind-driven rain, the formation of efflorescence, and penetration of fresh and salt water. Deep Seal withstands smog and air pollutants such as acid rain and hydrostatic pressure of 40 psi. It passes weatherometer tests after 3,000 hr. It does not affect glass or aluminum, is not flammable, and can be painted.

5. MANUFACTURER'S TECHNICAL DATA

For technical data, contact manufacturer at address listed above.

6. MANUFACTURER'S GUIDANCE FOR APPLICATION

Surface preparation: All surfaces which are to be sealed shall be free of dust, dirt, oil, grease, and other foreign material and must be dry to the degree required for satisfactory reception of the sealer. Surfaces shall not be acceptable for sealing if they contain cracks or voids in excess of 1/32" in width.

Penetration: The depth of penetration depends on the porosity of the substrate and ranges from approximately 20 mils when applied to a hard burned brick paver to about 500 mils when applied to a lightweight concrete block. In no instance is a permanent surface film deposited. If an excess of material has been applied, on drying, the surface will have a white residue which is readily brushed, wiped, or washed.

Application: Apply Deep Seal to all dense concrete substrates as soon after pour as indicated in the job specifications. For example: for pre-cast panels, apply either at point of manufacture or at job site. For concrete, Deep Seal may be applied as a combination cure-compound-sealer or at a later date solely as a sealer.

Apply to brick for the control of efflorescence after a minimum 40-day cure period. Moisture readings should

show no more than 15 percent moisture within the brick nor 7 percent on the surface. Sufficient time should be allowed after a rain for the brick to dry to the above levels before sealing.

For the sealing of lightweight concrete block, the manufacturer recommends Super Kote clear or colored heavy sealer.

Acceptable ambient temperatures: From above freezing to 120 °F.

Weather: Deep Seal can be applied in damp weather. The strength of the wind is a judgmental decision to be made by the applicator as to whether or not to seal.

The sealer should be applied by skilled and experienced applicators approved by Ven-Chem, using methods and equipment recommended by Ven-Chem. Hudson type sprayer may not be used.

Apply sealer in one coat. Quantity and coverage rate shall be according to the manufacturer's recommendations as determined by preliminary testing of samples as specified herein. Under no circumstances shall the quantity be less than that recommended in manufacturer's technical data for the specific surfaces involved.

Gloves should be worn as a precautionary measure, and clothing washed in water before wearing a second time.

Spray application: Use an airless sprayer. The nozzle orifice of the tip should be between .014 and .016 in. with a 12° fan spread. Follow standard spray procedures using the proper speed of movement for application of a flood coat. Do not dilute the sealer. Make certain that spray lines and suction tubes are absolutely clean of any contamination, particularly paint and stain used in previous operations. Where indicated, application may be by brush or roller if technique and coverage are approved by

sealer manufacturer. Water may be used for all cleanup, including removal of overspray from windows.

Warranty: Deep Seal is to be used on above grade vertical surfaces only. Contractor and applicator shall jointly and severally warrant that treated surfaces will remain waterproof and free of water intrusion for 5 years and that they will immediately repair and correct any deficiencies for leakage that may appear in treated surfaces during the warranty period at no cost to owner. Sealer manufacturer shall warrant to furnish all sealer required to correct leakage that appears within 5 years from date of substantial completion at no additional cost to owner. Leaks caused by structural cracking or movement are excepted from the warranty.

7. CORPS OF ENGINEERS' EVALUATION (tested as concrete sealers only)

Percent moisture absorption
(ambient temp) (ASTM C 642-82):

1 day	2.51%
2 days	4.15%
4 days	-
7 days	4.46%

Ratio of percent moisture absorption
for treated to nontreated specimen
(2-day submersion): 88.3%

8. ENVIRONMENTAL CONSIDERATIONS

Reasonable caution should guide the preparation, repair, and cleanup phases of activities involving potentially hazardous and toxic chemical substances. Manufacturer's recommendations to protect occupational health and environmental quality should be carefully followed. Material safety data sheets must be obtained from the manufacturers of such materials. In cases where the effects of a chemical substance on occupational health or environmental quality are unknown,

chemical substances should be treated
as potentially hazardous toxic
materials.