

# TECH DATA

Technical Information Sheet



## TECHNICAL DATA:

- PROTECT FROM FREEZING. Store product indoors at temperatures between 50°F and 100°F.
- SHELF LIFE: Minimum one year
- TYPICAL COVERAGE: 300 square feet per gallon; minimum 4 mils of wet film thickness per application; coverage varies with surface porosity
- DRY TIME: See applications
- COLOR: Light umber
- CONSISTENCY-VISCOSITY: Similar to a heavy paint made for roller application.
- NONTOXIC / NONFLAMMABLE. Keep container closed when not in use. If taken internally call physician and treat for ingestion of synthetic latex.
- PACKAGING: 4-gal. & 1-gal. plastic pails

**CLEANUP:** On fresh material use soap and water. Dry material must be scraped or abraded.

**LIMITATIONS:** Condition area to 70°F with a max. humidity of 60% RH for 48 hours prior to and after application. Concrete slab temperature should be min. of 55°F. Do not apply over existing coatings or floor coverings. Do not nail through ENCapSeal. Not recommended for use if alkalinity is over 11; reduce alkalinity level. Cannot be used as a wear layer or topping. Cover in 48 hours. Do not use over soft, heavy cutback or other spongy surfaces that may crack and cause failure of isolation or encapsulation.

**CAUTION:** May cause mild skin and eye irritation. Avoid contact with skin and eyes. Thoroughly wash exposed area with soap and water. Eyes: flush with large amounts of water, lifting upper and lower lids occasionally; if irritation persists see a physician. Ingestion: Do not induce vomiting. Call a physician immediately for treatment. Do not take internally. [Refer to Material Safety Data Sheet (MSDS) for further information.] **KEEP OUT OF REACH OF CHILDREN • KEEP CONTAINER CLOSED WHEN NOT IN USE**

# APAC

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# ENCapSeal™



ENCAPSULATOR • SEALER • PRIMER • pH BLOCKER  
FEATURING ECOPROTEK® (Total Antimicrobial Protection)

## DESCRIPTION

ENCapSeal™ is a high solid, fast drying, polymer based compound formulated to seal floors against moisture vapor emissions and elevated alkalinity (pH), also serves to encapsulate old adhesive residue in direct glue down floor covering applications. Substrates must be evaluated and prepared before applying ENCapSeal (see "Surface Preparations"). When applied to a properly prepared subfloor, ENCapSeal will reduce moisture vapor emissions of up to 8 pounds per 1,000 sq. ft. per 24 hours to as low as 3 pounds. ENCapSeal will also isolate old adhesive residue, including cutback residue\*, and prevent migration, and subsequent staining from these. ENCapSeal contains ECOPROTEK® our exclusive antimicrobial package that imparts protection against mildew and fungus attack of both the wet and dry sealer film. The protective layer formed by application of this product also serves to reduce odor transmission associated with damp slabs, and helps eliminate odors associated with urine in wood and concrete subfloors. ENCapSeal is solvent free, very low odor and user friendly.

\*Residue: defined as residual staining that is left after all adhesive has been scraped away down to the concrete surface.

## FEATURES & BENEFITS

- Encapsulates Old Adhesive Residue Including Cutback Residue
- Seals Surfaces & Reduces Moisture Emission
- Moisture & Alkali Resistant; Acts as a pH blocker when applied per manufacturers specifications
- Contains ECOPROTEK® Antimicrobial Protection
- Reduces Odor Transmission Associated with Damp Slabs.
- Improves Long-Term Bond Aging

## USE TO INSTALL

- For use under most types of floor coverings including, but not limited to wood, carpet, tile, ceramic, cork and resilient. ENCapSeal is compatible with all APAC waterborne adhesives.

## RECOMMENDED SUBSTRATES

- Concrete, plywood, hardboard, particle board of underlayment quality only, cement terrazzo, VCT, birch & lauan underlayment, self leveling compounds & gypcrete. (All surfaces must be prepared to industry standards &/or best practices.)

## MOISTURE TEST

- Perform testing for moisture vapor emissions per ASTM 1869, or use the insitu R.H. test method ASTM F2170. ENCapSeal™ can be used

to treat slabs with up to 8 pounds MVE per ASTM 1869, or 90% insitu relative humidity per ASTM F2170.

## pH Testing and Remediation:

- ENCapSeal™ serves as a pH blocker over concrete slab that have elevated pH readings. Slabs with pH readings of 11.0 or less require no additional remediation. Slabs with pH readings of 11.0 and above will require thorough cleaning and mopping with a 10% solution of muriatic acid, followed by a thorough rinsing. Then allow the floor to dry before proceeding with the application of ENCapSeal™.

## DIRECTIONS

### Surface Preparation:

Before application of ENCapSeal, floors must be tested as described in this section. After testing and determining what surface preparation must be done, prepare the substrate for coating with ENCapSeal™. For proper results, the room and sealer should be a minimum of 70°F and the humidity should be below 60% for 48 hours before and after application. Area to be sealed must be clean relatively dry, sound, and free from wax, dust, dirt, oil, curing and sealing compounds, and any other foreign matter that would inhibit bonding of ENCapSeal to the surface. Some concrete curing and sealing compounds can interfere with ENCapSeal penetrating and mechanically bonding to the substrate surface. Testing should be done to determine if concrete floors are porous, and if there are any sealers, or curing agents present that would cause lack of adhesion. Test for porosity by putting small puddles of water one-inch across at various points over the surface of the floor. If the water substantially soaks in within 30 minutes the floor is porous. If after testing it is determined that the substrate is nonporous, it may be necessary to remove the sealers or curing compounds that are causing the problem, by mechanically abrading, sanding or shot blasting the surface. Achieving a good bond is imperative to a successful application.

However, shot blasting is not always necessary even over nonporous surfaces. ENCapSeal™ exhibits excellent adhesion to many hard to bond to surfaces. Therefore a bond test should be done to determine if mechanical abrading will be necessary. This simple test will tell you if you have a bonding problem. Find an area of the floor out of traffic lanes, apply three 2-inch strips of masking tape to the clean floor

### TECHNICAL NOTES

**Calcium chloride testing over cutback adhesive residue:** Cutback adhesive residue can skew calcium chloride testing by suppressing vapor emissions during the course of the test. This can cause deceptively low moisture vapor emissions reading, which can cause failures of the subsequent flooring installation. ASTM 1869 requires the removal of all residue from the concrete surface before placing of the test kits. One way to achieve this over cutback is to abate, then abrade the concrete. All cutback residue must be thoroughly abated chemically at the test site, then the surface of the concrete at the test site must be ground off, and opened up before setting of the test kits. This will allow the moisture vapor present in the slab to move into the test dome, and give a much more valid reading of vapor emissions. (Cutback adhesive residue may contain asbestos fibers. All residue must be abated prior to grinding of the concrete surface in the test area.)

**Installations of impervious backings over ENCapSeal:** Impervious backing whether vinyl, or rubber roll goods, tile, or vinyl backed carpetings, must either be installed over a porous substrate, or installed with an adhesive that allows for the tacky method of installation. Do not use wet-lay only adhesives when installing impervious backings over ENCapSeal. Doing so will cause the water and chemicals in the adhesive to be sandwiched on top of the ENCapSeal. This can keep the adhesive from drying and can also compromise the ENCapSeal film.

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overlapping them one inch. Apply a roller coat application of ENCapSeal™ to the floor, and run this application up onto the tape. Allow first application to dry to the touch, and apply a second application, and allow to dry for 24 hours. After 24 hours carefully peel tape from the floor to the point where tape, floor, and ENCapSeal meet. Then carefully try to peel the sealer from the floor, if the sealer cannot be peeled, or scraped from the floor there are no negative bonding issues. Bond testing should begin at the same time as Anhydrous Calcium Chloride Testing. By doing this you will know what the next step is by the time moisture testing is quantified. As with the application of any sealant, or adhesive the substrate must be clean, and free from dust, dirt, oil, waxes or any other contaminates that will interfere with proper bonding.

### APPLICATION:

**Concrete:** Always apply two coats of ENCapSeal, and allow to dry for 24 hours prior to the application of any patching compounds. Surface preparation should be done to industry standards, and any patching or leveling should be done with cementitious based patching compounds that are polymer modified, and approved for these applications. (See APAC approved list of patching and self leveling products.) While ENCapSeal has a great affinity for a broad range of floor covering adhesives, and they can be applied directly over the cured film, however we recommend skim coating with an approved patching compound, before the installation of resilient tile and sheet goods. These floor covering require a very smooth level surface for installation, otherwise imperfections will telegraph to the surface of the floor covering. Expansion joints should be left intact. APAC will not warrant against film breakage due to movement of the expansion joints.

**Wood Floors:** Wood floors must be sound and thoroughly secured. Patching should be with a quality cementitious base polymer fortifier patching compound. Old adhesives must be thoroughly scraped away leaving only a residue. Soft adhesive residue of any kind will not support the ENCapSeal film, and may cause job failure.

**Self Leveling & Patching:** ENCapSeal™ can be used over certain self leveling products providing the recommended primer is used between the concrete and self leveling. (See APAC approved list of patching and self leveling products.) Our approved list will recommend either the manufacturers primer, or APAC V-BLOCK™ as the approved primers for the recommended self leveling products. Do not deviate from these recommendations. When the proper primer, and self leveling

compound have been applied, and allowed to dry, application of ENCapSeal™ can begin. Apply two coats and allow to dry 24 hours before proceeding with installation.

**Warning!** Do not sand, abrade or demolish existing resilient tile and sheet flooring, backing or lining felt. These products may contain asbestos fibers that are not readily identifiable. Avoid creating dust. Inhalation of asbestos dust may cause asbestosis or other serious bodily harm. If old floors must be removed, consult and follow the recommended work practices of the resilient flooring manufacturers.

1. Check product; settling may occur. If needed, mix until product is smooth and consistent.
2. Apply with a 1/8" to 3/8" nap roller (Surface texture and porosity will determine nap size). For smooth surfaces or second coats use a shorter nap roller; for rough or porous substrates use a thicker nap roller. Do not pour directly onto substrate surface. Using a paint pan apply ENCapSeal™, rolling in the same direction with even consistent strokes. Allow to dry 2-3 hours before applying second coat. Second coat should be applied horizontal, or at a 90° angle to the first coat. Film thickness should be six mils or more after final application dries.
3. Allow ENCapSeal to dry for 24 hours before patching. Always install ENCapSeal, then patch. Strictly follow patch manufacturer's directions for mixing and drying. APAC strongly suggest extending dry time to 24 hours before adhesive is applied.

### WARRANTY:

- ENCapSeal™ is warranted to control vapor emissions up to eight pounds/24 hours/1000 square feet.
- ENCapSeal™ has a five-year limited warranty covering materials, product and reasonable labor. (See ENCapSeal™ Warranty)
- ENCapSeal's warranty period is extended to seven-years when these premium APAC adhesives are used. 2001, 2000, 440, 440SF, 757, U-984, EZ-671, 610, 564, 560, VG-551, 539, 530, 510, and EZ-471.