

CrownSeal™ Hybrid

Product Number: 8316

Solvent-Based Polyamide-Mannich Epoxy Floor.

TECHNICAL DATA SHEET

Revision Date: 02/08/2018

DESCRIPTION

CrownSeal Hybrid is 2-part solvent-based polyamide-mannich epoxy floor coating. It is a semi-breathable coating that allows high moisture vapor to escape from the concrete. CrownSeal Hybrid is designed to be applied directly onto concrete as a sealer/primer or onto damp or hard-to-dry concrete. This product offers fast cure to prevent outgassing during topping application. It can be used as a stand-a-lone coating for concrete with high moisture readings or as a general-purpose primer. CrownSeal Hybrid's low viscosity penetrates deep into the concrete substrates resulting in excellent adhesion. This product is also an ideal primer for oil contaminated concrete substrates.

FEATURES

- Semi-breathable more than a standard epoxy flooring system
- Excellent adhesion to properly prepared concrete
- Can handle oil contaminated concrete when properly clean and prepared
- Outstanding resistance to mechanical abuse
- Good chemical resistance

TYPICAL USES

- Garages
- Laundries
- Schools
- Warehouses
- Retail Stores

COLORS

Available in clear
Special request for pigment – see color guide for color availability

STORAGE

This product has a minimum shelf life of one year when stored in a dry area at 50-110°F in the original sealed container.

LIMITATIONS

This product is best suited for application in temperatures between 60°F and 90°F. Higher temperature will result in faster dry time or poor workability. This product has solvent, it may require some air movement to allow for quicker drying time. Color may vary due to batch-to-batch variation, especially in higher temperature. Do not apply over ponding water. Do not apply when substrate temperature is rising. Do not use as a stand-alone UV resistance coating system. Must be recoat within 24 hours

HANDLING/SAFETY

Warning! Eye and skin irritant. May cause dermatitis and sensitization.

Always read and understand the product SDS.
Avoid contact with eyes, skin or clothing. Avoid breathing vapor, mist or spray. Use with good ventilation.

FIRST AID

In case of contact:

Eyes: Immediately flush with water for at least 15 minutes.
Skin: Immediately remove from skin with dry cloth followed by thorough washing with soap and water. Inhalation: Remove to fresh air. If breathing is difficult, give oxygen. Ingestion: Give large quantity of milk or water, induce vomiting. Contact a physician immediately.

CAUTION

Always read and understand the specific product data guide and SDS sheets before using this product. For more information, contact Crown Polymers.

PRELIMINARY FLOOR INSPECTIONS

CHECK THE CONCRETE:

Concrete must be structurally sound and free of curing membrane, paint or other sealer. If you suspect that the concrete has been previously sealed, call Crown Polymers technical support for further instructions.

CHECK FOR MOISTURE:

Concrete must be dry before application of this floor coating material. Concrete moisture testing must occur. Calcium chloride testing or in-situ relative humidity testing is recommended. Test methods can be purchased at www.astm.org, see ASTM F1869-11 or F2170-11, respectively or follow manufacturer's instructions. Readings must be below the defined threshold as specified for each Crown Polymers system to be installed directly to the concrete substrate. Please refer to the appropriate Technical Data Sheet for this information.

*Note: Although testing is critical, it is not a guarantee against future problems. This is especially true if there is no vapor barrier or the vapor barrier is not functioning properly and/or you suspect you may have concrete contamination from oils, chemical spills or excessive salts.

CHECK THE TEMPERATURE AND HUMIDITY:

Floor temperature and materials should be between 65°F (18°C) and 90°F (32°C). Humidity must be less than 95%. DO NOT coat unless floor temperature is more than five degrees over the dew point.

PHYSICAL CHARACTERISTICS

DESCRIPTION	PHYSICAL PROPERTIES
Components	2 Sides
Visual Appearance	Glossy
Density	8.8 lb/gal
VOC content	140 g/l
Pot Life @ 70°F 50% RH	2 Hours
Equipment	Brush, Roller & Squeegee
Number of Coats	2
Theoretical Coverage	300 ft ² /gal @ 5 mils WFT
Dry to Touch @ 70°F, 50%RH	60 minutes
Light Traffic	24 hours
Full Cure	7 days
Recoat Time @ 70°F	4 to 72 hours
Min. Application Temp.	50°F
Mix ratio by Volume	2:1 (A/B)

CHEMICAL DATA @ 70°F

DESCRIPTION	DATA
pH Range	4 to 13
Inorganic Acids	Good
Organic Acids	Good
Alkali	Excellent
Solvents	Good
Hydrocarbons	Good

MECHANICAL PROPERTIES

HARDENER TECH DATA	
Surface Prep Require	ICRI CSP-3
Adhesion, ASTM D7234	>400 psi, Concrete Failure
Hardness, Konig (4mils) ASTM D4366	150
Tensile Strength, ASTM D2370	4500 psi
Tensile Elongation, ASTM D2370	5%
Water Absorption, ASTM D570	<0.1%
Flame Test, ASTM D648	Class 1
Abrasion Resistance, ASTM D4060	50mg loss
Coefficient of Friction, ASTM D2047	0.7 smooth
Permeance, ASTM E96	Breathable
Impact Resistance, ASTM D2794	160 in/lb

APPLICATION

I. SURFACE PREPARATION: Requires ICRI CSP 3

This product requires preparation to perform as expected. Substrate must be mechanically profiled (ASTM 4259-83), clean, sound, and dry.

II. APPLICATION EQUIPMENT:

Tools: 3" Disposable brush, low speed drill with 3.5" jiffler blade, 3/8" nap non-shedding phenolic Core, and a flat rubber squeegee.

III. MIXING:

The temperature of the (A) and (B) portions should be between 70-80°F (20-25°C). Mix them separately to insure a uniform consistency.

For a 1.5 gallon unit, add 1 gallon part A into 0.5 gallon part B into a 2gallon bucket. Mix contents **thoroughly** until all components are completely incorporated and no streaking is observed.

If thinning is required, add a pint of xylene and mixed **thoroughly**. These portions are accurately measured, and best product performance will be obtained if all the Hardener and Base is combined. Pouring from one container to the other (boxing) during mixing is very helpful in insuring complete mixing.

IV. ROLL ON: Two-Step dust proof clear concrete sealer application

Priming concrete application: After mixing all contents as instructed, immediately pour out into a ribbon on the surface. Squeegee the material out evenly and check for desired film thickness by using a wet-film thickness gauge. Back-rolling may be necessary in certain applications. Allow the material to soak into the concrete. Dilution maybe required depending upon the porosity of the concrete. Allow to dry min. 4 hours before recoating.

Second coat application: After mixing all contents as instructed, immediately pour out into a ribbon on the surface. Squeegee the material out evenly and check for desired film thickness by using a wet-film thickness gauge. Back-rolling and cross-rolling may be necessary in certain applications. All min. 24 hours for light duty traffic.

TECHNICAL SUPPORT

For any application questions, please call Crown Polymers technical team.

DISPOSAL

Dispose in accordance with federal, state and local regulations.

SDS

PLEASE SEE SAFETY DATA SHEET (SDS) FOR SAFETY AND PRECAUTIONS. USE PRODUCT AS DIRECTED.

KEEP OUT OF THE REACH OF CHILDREN.

DISCLAIMER

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests. The accuracy and completeness of such tests are not guaranteed and are not to be construed as a warranty, expressed or implied. It is the responsibility of the user to document information and tests to determine the intent of the product for ones' own use. The application, job conditions and user assumes all risks and liability resulting from use of the product. We do not suggest or guarantee any hazards listed herein are the only ones, which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use the product. Recommendations or statements, whether in written or verbal, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Crown Polymers makes no claim that these tests or any other tests accurately represent all environments. Not responsible for any typographical errors.

LIMITED WARRANTY

Crown Polymers warrants its products to be free of manufacturing defects and meets all Crown Polymers current published physical properties. Crown Polymers' sole responsibility shall be to replace the portion of any product proved to be defective. There are no other warranties by Crown Polymers of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Crown Polymers shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Crown Polymers shall not be responsible for the use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee pertaining to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator will be issued. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Crown Polymers reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.



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