

DPC-671: 100% Epoxy Clear TECHNICAL DATA SHEET

DESCRIPTION

DPC-671 is a two-component 100% solids epoxy seal coat that can be used either as a coating or filled with paint chips, marble chips, and colored sand mixtures to provide an infinite array of color schemes or patterns. This product can be used in conjunction with metallic pigments to create unique artistic flooring designs that are “one of a kind.”

RECOMMENDED FOR:

Recommended for warehouses, kitchens, basements, garages, restrooms, or any other interior space in which a decorative floor is desired.

RATING KEY

- A - not recommended
- B - 2 hour term splash spill
- C - 8 hour term splash spill
- D - 72 hour immersion,
- E - long term immersion.

NOTE: extensive chemical resistance information is available through your sales representative.

CHEMICAL RESISTANCE:

REAGENT	RATING
butanol	C
xylene	C
1, 1, 1 trichloroethane	B
MEK	A
methanol	A
ethyl alcohol	C
skydrol	B
10% sodium hydroxide	E
50% sodium hydroxide	D
10% sulfuric acid	C
70% sulfuric acid	A
10% HCl (aq)	C
5% acetic acid	B



TECHNICAL DATA

PACKAGING	3 gallon kit & 15 gallon kits
COVERAGE RATE	90-100 square feet per gallon @ 16-18 mils
RECOMMENDED THICKNESS	16-18 mils
MIX RATIO, BY VOLUME	9.0 pounds part A (.99 gallons) to 4.15 pounds part B (.49 gallons) (volumes approx.)
FINISH CHARACTERISTICS:	Gloss (>70 @ 60 degrees @ glossmeter)

CURE SCHEDULE:

pot life – 1 1/2 gallon volume 20-30 minutes @ 70° F
 tack free (dry to touch).....7-10 hours @ 70° F
 recoat or topcoat..... 12-18 hours @ 70°F
 light foot traffic.....16-24 hours @ 70°F
 full cure (heavy traffic).....2-7 days @ 70°F

PRIMER:

Recommended: DPC409, DPC015,
DPC144, DPC154, DPC707LVP

TOPCOAT:

Optional – depending on the environment, an aliphatic urethane can provide additional chemical resistance and UV resistance. Discuss this topic with your sales representative.

APPLICATION TEMPERATURE:

55-90 degrees F

ADHESION:

350 psi @ elcometer (concrete failure, no delamination)

VISCOSITY:

Mixed = < 700 cps (typical)

DOT CLASSIFICATIONS:

Part A "not regulated" | Part B "CORROSIVE LIQUID N.O.S., 8, UNI1760, PGIII"

HARDNESS:

Shore D = 81

* The indicated mileage is calculated for flat surfaces. A porous or imperfect surface will require more material in order to cover the same mileage. *

* Times are approximate and will be affected by changing ambient conditions, especially changes in temperature and relative humidity.

SOLIDS BY WEIGHT:

100%

SOLIDS BY VOLUME:

100%

VOLATILE ORGANIC CONTENT:

Less than 2 g/l

STANDARD COLORS:

Clear – gardner color 1-2

ABRASION RESISTANCE:

Taber abraser CS-17 calibrase wheel with 1000 gram total load and 500 cycles = 36 mg loss

FLEXURAL STRENGTH:

7,400 psi @ ASTM D790

COMPRESSIVE STRENGTH:

11,200 psi @ ASTM D695

TENSILE STRENGTH:

7,600 psi @ ASTM D638

ULTIMATE ELONGATION:

4.1%

GARDNER VARIABLE IMPACTOR:

50 inch pounds direct – passed

PRODUCT STORAGE

Store product in an area so as to bring the material to normal room temperature before using. Continuous storage should be between 60 and 90 degrees F. Low temperatures or temperature fluctuations may cause crystallization.

SURFACE PREPARATION

The most suitable surface preparation would be a fine brush blast (shot blast) to remove all laitance and provide a suitable profile. All dirt, foreign contaminants, oil, and laitance must be removed to ensure a trouble-free bond to the substrate. A test should be made to determine that the concrete is dry; this can be done by placing a 4'X4' plastic sheet on the substrate and taping down the edges. If, after 24 hours, the substrate is still dry below the plastic sheet, then the substrate is dry enough to start coating. The plastic sheet testing is also a good method to determine if any hydrostatic pressure problems exist that may later cause dis-bonding.

MIXING

This product has a mix ratio of 9.0# part A to 4.15# part B. Standard packages are in pre-measured kits and should be mixed as supplied in the kit. We highly recommend that the kits not be broken down unless suitable weighing equipment is available. After the two parts are combined, mix well with slow-speed mixing equipment such as a jiffy mixer until the material is thoroughly mixed and streak-free. After mixing, transfer the mixed material to another pail (the transfer pail) and again remix. The material in the transfer pail is now ready to be applied on the primed substrate. Improper mixing may result in product failure.



PRIMING

A suitable primer should be used before applying this product. See the front side of this technical data for primer information. If a primer is not used, more porous substrates may cause outgassing and possible surface defects.

APPLICATION

The mixed material can be applied by brush or roller. However, the material can also be applied by a suitable serrated squeegee and then back-rolled as long as the appropriate thickness recommendations are maintained. Maintain temperatures and relative humidity within the recommended ranges during the application and curing process. If concrete conditions or over-aggressive mixing causes air entrapment, then an air-release roller tool should be used prior to the coating tacking off to remove the air entrapped in the coating. This product can be used with various colored sand in a broadcast system, or other suitable aggregate can be used in conjunction with this product to achieve a variety of color and application patterns. When using it as a broadcast binder, performance parameters should always be evaluated with a test area that is dependent on aggregate size and thickness prior to application. When used in conjunction with metallic pigments, for best results, pre-mix the pigment into Part A before adding Part B. Contact your representative for details as necessary.

RECOAT OR TOPCOATING

If you opt to recoat or topcoat this product, you must first ensure the coating has tacked off before recoating. Always remember that colder temperatures will require more cure time for the product before recoating or top-coating can commence. Before recoating or top-coating, check the coating to ensure no epoxy blushes were developed (a whitish, greasy film or de-glossing). If a blush is present, it must be removed prior to top-coating or recoating. Many aliphatic urethanes and polyaspartics are compatible for use as a topcoat for this product, as well as multiple coats of this product.

CLEANUP

Use xylol

FLOOR CLEANING

Caution! Some cleaners may affect the color. Test each cleaner in a small area. If no ill effects are noted, you can continue to clean with the product and process tested.

RESTRICTIONS

Restrict the use of the floor to light traffic and non-harsh chemicals until the coating is fully cured (see technical data under full cure). It is best to let the floor remain dry for the full cure cycle. Depending on the actual complete system application, the surface may be slippery, especially when wet or contaminated; keep the surface clean and dry.



DISCLAIMER

We warrant that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine the suitability of our product for your particular purpose. Any use or application other than recommended herein is the sole responsibility of the user. Listed physical properties are typical and should not be construed as specifications. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, REGARDING SUCH OTHER INFORMATION, THE DATA ON WHICH IT IS BASED, OR THE RESULTS YOU WILL OBTAIN FROM ITS USE. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, THAT OUR PRODUCT SHALL BE MERCHANTABLE OR OUR PRODUCT SHALL BE FIT FOR ANY PARTICULAR PURPOSE. NO WARRANTY IS MADE THAT THE USE OF SUCH INFORMATION OR OUR PRODUCT WILL NOT INFRINGE UPON ANY PATENT. We shall have no liability for incidental or consequential damages, direct or indirect. Our liability is limited to the net selling price of our product or the replacement of our product at our option. Acceptance of delivery of our product means that you have accepted the terms of this warranty, whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Our products contain chemicals that may CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL PRECAUTIONS TO PREVENT BODILY HARM.

LIMITATIONS:

- *Color stability or gloss may be affected by environmental conditions such as high humidity, chemical exposure, UV exposure or exposure to lighting such as sodium vapor lights.
- *Color clarity may vary from batch to batch. Therefore, use only product from the same batch for an entire job.
- *This product is not UV color stable. Clear aliphatic urethane topcoats reduce (UV light) color changes.
- *Substrate temperature must be 5°F above dew point.
- *For best results, apply with a ¼" nap roller.
- *All new concrete must be cured for at least 30 days prior to application.
- *Apply a suitable primer before using this product
- *See reverse side for application instructions.
- *Physical properties are typical values and not specifications.
- *See reverse side for limitations of our liability and warranty.

