

DIAMOND POLYMERS

DP820 – TECHNICAL DATA EPOXY (OIL STOP) COATING

PRODUCT DESCRIPTION:

DP820 is a two component solvent based epoxy coating that exhibits excellent characteristics for coating over petroleum based oil contaminated concrete. This product allows excellent substrate penetration which results in excellent adhesion and is an ideal primer for the oil contaminated concrete substrate.

RECOMMENDED FOR:

Recommended for petroleum oil contaminated substrates. However, this product is not intended for use over vegetable oil, animal fat or synthetic oil contaminated concrete. This product can withstand exposure to many common solvents and chemicals.

SOLIDS BY WEIGHT:

Mixed= 71.5% (+, - 2%)

SOLIDS BY VOLUME:

Mixed= 63% (+, - 2%)

VOLATILE ORGANIC CONTENT:

Part A= 2.5 pounds per gallon

Part B= 2.75 pounds per gallon

COLORS AVAILABLE:

Black only

RECOMMENDED FILM THICKNESS:

5-8 mils per coat (wet thickness)

3-5 mils dry

COVERAGE PER GALLON:

200-320 square feet @ 5-8 mils wet thickness

PACKAGING INFORMATION

2 gallon and 10 gallon kits (volumes approx.),

2 gal kit= 1 gallon part A (10.05#/gal) and 1 gallon part B (8.6#/gal)

(weights approximate)

MIX RATIO:

1 part A to 1 part B by volume

SHELF LIFE:

1 year

ABRASION RESISTANCE:

Taber abraser CS-17 calibrase wheel with 1000 gram total load and 500 cycles = 37.0 mg loss

FLEXIBILITY:

No cracks on a 1/8" mandrel

FINISH CHARACTERISTICS:

Satin gloss (40-60 at 60 degrees @ Erichsen glossmeter)

VISCOSITY:

Mixed = 150-300 cps (typical)

DOT CLASSIFICATIONS:

Part A "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII"

Part B "FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII"

IMPACT RESISTANCE:

Gardner Impact, direct= 50 in. lb (passed)

CURE SCHEDULE: (70°)

pot life – 2 gallon volume2-4
hours

tack free (dry to touch)..... 2-4
hours

recoat or topcoat..... 4-8
hours

light foot traffic.....16-24
hours

full cure (heavy traffic)...2-7
days

APPLICATION TEMPERATURE:

55-90 degrees F.

CHEMICAL RESISTANCE:

REAGENT	RATING
acetic acid 5%	A
xylene	B
toluene	B
1,1,1 trichloroethane	A
MEK	A
gasoline	B
10% sodium hydroxide	E
50% sodium hydroxide	D
10% sulfuric	C
10% hydrochloric acid	C
20% nitric acid	A
ethylene glycol	C

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.

PRIMER:

None required

TOPCOAT:

Optional- We recommend one (1) coat of DP143/144 followed by two (2) coats of DP321 in the same color as the DP143/144. Many other products are suitable as topcoats. Consult your representative.

LIMITATIONS:

*For best results use a high quality 3/8" nap roller.

*Slab on grade requires moisture barrier.

*Substrate temperature must be 5°F above dew point

*All new concrete must be cured for at least 30 days prior to application.

*Color may vary slightly from batch to batch.

*Always apply a test patch of the entire system prior to using to determine the suitability and adhesion characteristics.

*See reverse side for application instructions.

*Physical properties are typical values and not specifications.

*See reverse side for limitations of our liability and warranty.

INSTRUCTIONS (DP820)

- 1) **PRODUCT STORAGE:** Store product at normal room temperature. Continuous storage should be between 60 and 90 degree F.
- 2) **SURFACE PREPARATION:** Surface preparation will vary according to the type of complete system to be applied. Make certain that the substrate where the DP820 is to be applied is clean, sound and free of all laitance, dirt, dust, oil, grease, or foreign contaminants. Make certain that the floor is completely dry before application. It is often undesirable to shot blast a petroleum contaminated concrete surface unless the applicator is prepared to steam and solvent clean the area. Shot blasting tends to open oil filled pores that will be detrimental to the application process. The method of cleaning an oil soaked floor is best determined at the job location. However, solvent cleaning, steam cleaning, and water emulsion cleaners can all be considered. 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 disbonding.
- 3) **PRODUCT MIXING:** This product has a one to one mix ratio by volume- merely mix equal volumes such as 1 gallon of part A to 1 gallon of part B. After the two parts are combined, mix well with slow speed mixing equipment such as a jiffy mixer until streak free. Improper mixing may result in product failure.
- 4) **PRODUCT APPLICATION:** We recommend one coat of DP820 followed by one coat of DP143/144 and then two additional coats of DP320/321 in the same color as the DP143/144. Due to the vastly varying contamination parameters, it is recommended that the applicator both check the adhesion of this product to the substrate as well as a thorough evaluation of the proposed intermediate and topcoat selections. Petroleum based oils have a tendency to migrate upward through newly placed coatings and could cause disbonding if all preceding coats are not inspected prior to topcoating. Clean all previous coatings as necessary. **THIS COATING SHOULD NOT BE USED UNTIL A REPRESENTATIVE SAMPLE PATCH HAS BEEN PLACED AND THOROUGHLY EVALUATED FOR SUITABILITY.** Make certain that the floor temperature and air temperature is between 55 and 90 degrees Fahrenheit. Preferably, the relative humidity should be below 90%. This product should be applied by roller or brush at five to eight mil thickness when wet. Too thick of an application may result in product failure.
- 5) **RECOAT OR TOPCOATING:** After applying the DP820 and the coating has cured sufficiently, the applicator can then proceed with the DP143/144, DP321, application. Allow sufficient time between all subsequent coatings; and remember, as temperatures become lower all products will require additional time to cure. Read the individual technical data sheets for each product before proceeding. If different topcoats are desired, contact your representative for application details before proceeding.
- 6) **CLEANUP:** Use xylol.
- 7) **FLOOR CLEANING:** Caution! Some cleaners may affect the color of the floor installed. Test each cleaner in a small area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.
- 8) **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.

NOTICE TO BUYER: DISCLAIMER OF WARRANTIES AND LIMITATIONS ON OUR LIABILITY

*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. 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 THAT 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.***