

DIAMOND POLYMERS

DP031 – TECHNICAL DATA WATER BASED ACRYLIC URETHANE SEALER

PRODUCT DESCRIPTION:

DP031 is a one component water based acrylic urethane sealer that offers excellent clearness without the objectional solvent odors associated with other urethane products. This product has an extremely fast set time and a very long pot life.

RECOMMENDED FOR:

Recommended for coating concrete or masonry. Do not use in immersion service or constant chemical exposure areas.

SOLIDS BY WEIGHT:

Mixed= 25% (+/- 2%)

SOLIDS BY VOLUME:

Mixed = 22% (+/- 2%)

VOLATILE ORGANIC CONTENT:

VOC= 0.87#/gallon

COLORS AVAILABLE:

This product is available in a clear only

RECOMMENDED FILM THICKNESS:

3-4 mils wet (0.5 – 1.0 mils dry)

COVERAGE PER GALLON:

401-534 square feet @ 3-4 mils wet thickness

PACKAGING INFORMATION

This product is available in 1 gallon and 5 gallon kits (volumes approximate)

MIX RATIO:

One component product, simply stir before using

SHELF LIFE:

1 year in unopened containers

FINISH CHARACTERISTICS:

Gloss (70-100 at 60 degrees @ Erichsen glossmeter)

ABRASION RESISTANCE:

Taber adrasor CS-17 calibrase wheel with 1000 gram total load and 500 cycles = <50 mg loss

IMPACT RESISTANCE:

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

FLEXIBILITY:

No cracks on a 1/8" mandrel

ADHESION:

345 psi @ elcometer (concrete failure, no delamination)

VISCOSITY:

Less than 100 cps (typical)

DOT CLASSIFICATIONS:

Not regulated

ELONGATION AT BREAK:

105%

CURE SCHEDULE: (70°)

pot life – 1 gallon volume 24 hours
tack free (dry to touch)..... 10-20 minutes
recoat or topcoat..... 1-2 hours
light foot traffic.....2-4 hours
full cure (heavy traffic).....2-3 days

APPLICATION TEMPERATURE:

55-100 degrees F with relative humidity below 85%

CHEMICAL RESISTANCE:

REAGENT	RATING
xylene	A
mek	A
gasoline	A
10% sodium hydroxide	B
50% sodium hydroxide	B
acetic acid 5%	A
10% sulfuric	B
10% hydrochloric acid	B
20% nitric acid	A
ethylene glycol	B

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:

None required. Multiple coats of this product are compatible.

LIMITATIONS:

*Clarity of color or gloss may be affected by high humidity, low temperatures or chemical exposure. Lighting like sodium vapor lights may affect color.

*For best results use a good 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

*Do not apply this product to areas where there is standing water, damp concrete can be coated.

*Additional coats should be applied before a twenty four hour time period has elapsed, otherwise, it may be necessary to slightly roughen and degloss the previous coat.

*Too thick of an application may result in solvent entrapment and subsequent product failure.

*Physical properties listed on this technical data sheet are typical values and not specifications.

*See reverse side for application instructions.

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

- 1) **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 degree F. Keep from freezing.
- 2) **SURFACE PREPARATION:** Surface preparation will vary according to the type of complete system to be applied. For a one or two coat thin build system (3-10 mils dry) we recommend either mechanical scarification or acid etching until a suitable profile is achieved. For a complete system build higher than 10 mils dry, we recommend a fine brush blast (shot blast). All dirt, oil, dust, foreign contaminants and laitance must be removed to assure a trouble free bond to the substrate. A test should be made to determine that the concrete has an appropriate vapor barrier. 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 does not show signs of eventual hydrostatic pressure problems that may later cause disbanding. However, this product can be applied to a damp floor as long as there are not standing puddles.
- 3) **PRODUCT MIXING:** This product should be stirred well before using. Mix with slow speed mixing equipment to avoid introducing air into the material.
- 4) **PRODUCT APPLICATION:** The material can be applied by brush or roller. Maintain temperatures and humidity within the recommended ranges during the application and curing process.
- 5) **RECOAT OR TOPCOATING:** If you opt to recoat this product, you must first be sure that all of the solvents and water have evaporated from the coating during the curing process. The information on the front side are reliable guidelines to follow. However, it is best to test the coating before recoating or topcoating. This can be done by pressing on the coating with your thumb to verify that no fingerprint impression is left. If no impression is created, then the recoat or topcoat can be started. Always remember that colder temperatures will require more cure time for the product before recoating can commence. We do not recommend any coatings be placed over this product except multiple coats of this product itself. If previous coats have a blush, clean with a standard type detergent cleaner.
- 6) **CLEANUP:** Use PM solvent
- 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.***