

DIAMOND POLYMERS

DP139R – TECHNICAL DATA FLEXIBLE RUBBER MODIFIED EPOXY WALKWAY

PRODUCT DESCRIPTION:

DP139R is a three component 100% solids epoxy incorporating the addition of rubber granules to provide texture and slip resistance. This formulation has excellent elongation and is designed to be self priming. The toughness and elongation eliminate the need to repair hairline cracks.

RECOMMENDED FOR:

Recommended for general walking surfaces.

SOLIDS BY WEIGHT:

100% (+/- 1%)

SOLIDS BY VOLUME:

100% (+/- 1%)

VOLATILE ORGANIC CONTENT:

zero pounds per gallon

COLORS AVAILABLE:

Medium gray and black (special colors available upon request)

RECOMMENDED THICKNESS:

50-75 mils

COVERAGE PER GALLON:

21-32 square feet per gallon @ 50-75 mils

PACKAGING INFORMATION:

3.0 gallon kit (2 gallons liquid) (volume approximate)

MIX RATIO:

3.0 gallon kit = 9.2 pounds (1 gallon) part A to 8.2 pounds (1.0 gallon) part B and 10.2 pounds rubber granules. (volumes approx.)

SHELF LIFE:

1 year in unopened containers

ABRASION RESISTANCE:

Taber abraser CS-10 callibrase wheel with 1000 gram total load and 500 cycles = 6 mg loss (liquids only).

VISCOSITY:

Mixed Liquids = 1,000-1,700 cps (typical)

DOT CLASSIFICATIONS:

Part A and C "not regulated"

Part B "CORROSIVE LIQUID N.O.S., 8, UN1760,PGIII"

FLEXURAL STRENGTH:

2,600 psi @ ASTM D790

COMPRESSIVE STRENGTH:

4,100 psi @ ASTM D695

TENSILE STRENGTH:

2,450 psi @ ASTM D638

ULTIMATE ELONGATION:

60%

GARDNER VARIABLE IMPACTOR:

160 inch pounds direct- passed

ADHESION:

450 psi @ elcometer (concrete failure, no delamination)

HARDNESS:

Shore D= 58

CURE SCHEDULE: (70°)

pot life (2 gallon volume).....15-25 minutes
tack free (dry to touch) 5-8 hours
recoat or topcoat..... 8-12 hours
light foot traffic.....12-24 hours
full cure (heavy traffic).....2-7 days

APPLICATION TEMPERATURE:

60-90 degrees F with relative humidity below 90%

CHEMICAL RESISTANCE:

REAGENT	RATING
xylene	A
methanol	A
skydrol	A
10% sodium hydroxide	D
50% sodium hydroxide	D
10% sulfuric acid	C
10% HCl (aq)	C
5% acetic acid	A

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 normally required.

LIMITATIONS:

- *Clarity or color may be affected by environmental conditions such as high humidity, low temperatures, or chemical exposure.
- *Clarity or color may vary from batch to batch. Therefore, use only product from the same batch for an entire job.
- *Mix the part A and part B together well before adding in the rubber granules.
- *This product is not suitable in all chemical environments. When chemical exposure is imminent, a test should be performed to test suitability.
- *Substrate temperature must be 5°F above dew point.
- *All new concrete must be cured for at least 30 days prior to application.
- *Applications with relative humidity above 90% or early water contamination may cause white discolorations to develop.
- *Improper mixing may result in product failure.
- *Physical properties are based on liquids only.
- *See reverse side for application instructions.
- *Physical properties are typical values and not specifications.
- *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. Low temperatures or temperature fluctuations may cause crystallization.
- 2) **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 assure 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.
- 3) **PRODUCT MIXING:** This product has a mix ratio of 9.2# part A to 8.2# part B with the addition of 10.2 pounds rubber granules or one part A to one part B by volume for the liquids. 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 liquid 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 the liquids are mixed, blend in the rubber granules.
- 4) **PRIMING:** Primers may be beneficial in some applications, dependent on performance characteristics and substrate condition, but none are required for product application.
- 5) **PRODUCT APPLICATION:** First, mask off the area where the liquid rubber walkway is to be installed. Then pour/spread walkway liquid rubber onto masked off area. Next, firmly press down on the material with a PHENOLIC CORE roller and spread the material evenly on the surface. Pour only enough material at one time that allows for rolling the material before it becomes tack free. Firm application pressure applied on the phenolic core roller will provide the texture and assure that the material is not being applied too thick. Be sure to apply this product at the specified coverage rate or recommended mil thickness. In some instances where a smoother finish is desired, the applied material can be compacted and smoothed out by use of a trowel. Mix and use only an amount of material that can be used in the prescribed pot life period as listed on page one.
- 6) **RECOAT OR TOPCOATING:** No topcoat is recommended. Colder temperatures will require more cure time for the product before allowing traffic.
- 7) **CLEANUP:** Use xylol
- 8) **FLOOR CLEANING:** Caution! Some cleaners may affect the color of the floor installed. Test each cleaner in a small area. If no ill effects are noted, you can continue to clean with the product and process tested.
- 9) **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.***