

# DIAMOND POLYMERS

## DP418R – TECHNICAL DATA

### COPOLYMER LIQUID RUBBER WALKWAY

**PRODUCT DESCRIPTION:**

DP418R is an elastomeric copolymer rubber based liquid with rubber granules incorporated to provide texture and slip resistance. The modified formulation has excellent elongation, UV resistance and weathering characteristics. This flexible textured membrane also has excellent resistance to ozone as well as low temperature flexibility. DP418R liquid rubber walkway has displayed good adhesion to many properly prepared substrates.

**RECOMMENDED FOR:**

Most common substrates such as wood, metal, cement, and concrete.

**NOT RECOMMENDED FOR:**

Application over tar based substrates

***THIS PRODUCT IS ALSO AVAILABLE INCORPORATING A FRAGRANCE MASK TO DIMINISH THE SOLVENT ODOR (UPON REQUEST)***

**SOLIDS BY WEIGHT:**

67% (+,-3)

**SOLIDS BY VOLUME:**

61% (+,-3)

**RECOMMENDED COVERAGE:**

Coverage depends on surface conditions and application procedures. Normally, 1 gallon per 17.5 square feet provides the correct coverage thickness.

**COLORS:**

Standard: shadow gray. Many other colors are available upon request. Colors may vary from batch to batch due to variations in feed stock material.

**RECOMMENDED DRY THICKNESS:**

55 mils total dry film thickness will result from applying the recommended 90 mils wet thickness.

**PACKAGING:**

Available in 5 gallon pails (volumes approximate per container)

**TYPICAL PROPERTIES: (LIQUID FORM)**

PROPERTY	TEST METHOD	RESULT
Density	ASTM D1475 U.S. standard weight per gallon cup at 75°F and 50% R.H.	Mean=10.45#/gallon
VOC	EPA Method 24	3.43#/gallon
Heat stability	10 days at 120°F then re-evaluated	Material stability maintained
Shelf life	Closed container at 65°F	One year shelf life
Flash point	ASTM D3278 seta flash closed cup apparatus	105°F

**BENEFITS OF USING**

- Excellent adhesion to a variety of substrates
- Excellent low temperature flexibility
- Excellent weathering
- Excellent UV stability
- Excellent shelf life
- Good resistance to dirt pickup
- Excellent flexibility
- Easy to use one component product
- Meets Federal VOC requirements
- Resists mildew and fungi growth
- Good resistance to Alkalis and acids

**TYPICAL PROPERTIES: (CURED FILM)**

PROPERTY	TEST METHOD	RESULTS
Hardness	ASTM D2240 shore A @ 75°F 50% R.H. Barcol hardness tester model 3061	50-60
Accelerated weathering	ASTM G53 (1000 hours QUV accelerated weather tester UV-B lamps no. QES-40/280-315 nanometers (12 hr. QUV @ 60°C and 12 hr. con @ 50°C)	Excellent with no apparent degradation
Tensile strength	ASTM D412 @ 75°F and 50% R.H. Test is result of medium value (for three)	1100 psi
Elongation	ASTM D412 @ 75°F and 50% R.H.	500% minimum
Reflectivity	ASTM E97	85% (white)
Water absorption		0.04%
Vapor transmission	ASTM D-986	0.025 perms
Cure time	@70% R.H./70°F	24-48 hours

**LIMITATIONS**

- \*Allow material to cure (24 hours) before exposure to rain or dew. Do not apply a second coat until the first coat is dry. Normally one coat is recommended.
- \*Close all sources of air intake from area to prevent solvent odor transfer into other building areas. Do not use indoors without proper ventilation.
- \*Product cures from solvent evaporation- do not apply thicker than recommended.
- \*Read the MSDS before using this product.
- \*Product is not resistant to solvent exposure.
- \*Physical properties are typical values and not specifications. Please see reverse side for limitations of our liability and warranty.
- \*Too thick of an application may cause some solvent entrapment. If excessively thick applications, are required, apply multiple coats. Normally, one coat applications are typical.

**DOT CLASSIFICATIONS**

“FLAMMABLE LIQUID N.O.S., 3, UN1993, PGIII”

- 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 80 degree F.
- 2) **MIXING:** Mix the material before use as needed to provide a uniform mixture. Mix with slow speed equipment to minimize air being whipped into product.
- 3) **SURFACE PREPARATION:** Make certain that the substrate where the product is to be applied is clean, sound and free of all laitance, dirt, dust, oil, grease, water, dew or foreign contaminants. The most suitable surface preparation would be a fine brush blast (shot blast) to remove all laitance and provide a suitable profile. 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.
- 4) **ENVIRONMENTAL CONDITIONS:** Do not apply material when temperature is below 40°F during the application time or drying period. Apply material when RH is below 90% for best results. Allow for adequate dry times between coats or before use.
- 5) **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. Too thick of an application may result in solvent entrapment. Apply one gallon per 17.5 square feet per coat.
- 6) **REOPEN SERVICE TIME:** Take notice of the full cure time and do not open the area to abusive use before the full characteristics of the coating is achieved. Apply when weather permits 24 hours of rain free curing. Allow for 72 hour dry time before opening to aggressive use or heavy traffic vehicles.
- 7) **MAINTENANCE:** Provide for routine maintenance to assure long term trouble free performance.

## 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.***

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