

DIAMOND POLYMERS

DP418 – TECHNICAL DATA COPOLYMER ROOF COATING

PRODUCT DESCRIPTION:

DP418 is an Elastomeric copolymer liquid rubber coating modified for excellent elongation, tensile strength, UV resistance and exceptional weathering characteristics. This flexible membrane has excellent waterproofing performance and resistance to ozone as well as low temperature flexibility. This product has shown good adhesion to many properly prepared substrates including EPDM.

RECOMMENDED FOR:

Most common roof substrates such as wood, metal, EPDM, APP, TPO, and Hypalon.

NOT RECOMMENDED FOR:

Application over tar based roofing

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

SOLIDS BY WEIGHT:

58% (+,-3)

SOLIDS BY VOLUME:

51% (+,-3)

RECOMMENDED COVERAGE:

Coverage depends on surface conditions and application procedures. Normally, 1 gallon per 100 square feet of a base coat and 1 gallon per 100 square feet of a topcoat combine to achieve the recommended 32 mils wet thickness (16 mils each coat).

COLORS:

Topcoat: white. BASECOAT: available in various colors or white. Colors may vary from batch to batch due to variations in feed stock material

RECOMMENDED DRY FILM THICKNESS:

16-17 mils total dry film thickness will result from applying the recommended 32 mils wet thickness (applied in two coats)

PACKAGING:

Available in 5 gallon pails and 55 gallon drums (volumes approximate per container)

TYPICAL PROPERTIES: (LIQUID FORM)

PROPERTY	TEST METHOD	RESULT
Viscosity @ 75°F, 50% R.H.	BROOKFIELD VISCOMETER (krebs stormer)	5,000-10,000 (142 krebs typical)
Density	ASTM D1475 U.S. standard weight per gallon cup at 75°F and 50% R.H.	Mean= 9.85#/gallon
Particle size	ASTM D1218	<38 microns or hegman 4-5
VOC	EPA Method 24	4.15#/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	104°F

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)	1200 psi
Elongation	ASTM D412 @ 75°F and 50% R.H.	500% minimum
Reflectivity	ASTM E97	90% (white)
Water absorption		0.04%
Vapor transmission	ASTM D-986	0.025 perms
Cure time	@70% R.H./70°F	24-48 hours

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

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.
 *Close all sources of air intake from roof into building to prevent solvent odor transfer into building. Do not use indoors.
 *Product cures from solvent evaporation- do not apply thicker than recommended. Too thick of an application can effect insulation boards such as EPS.
 *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 can effect insulation boards such as EPS.

- 1) **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. Power washing will be an effective preparation method for most substrates. Wire brush or abrasive blast all loose and scaling rust from metal surfaces. When topcoating EPDM or seamed roofs, make sure all seams are secure. Precautions should be exercised when coating surfaces with insulation boards such as EPS to determine that the coating will not affect the underlying insulation. When the type of insulation board is unknown, a suitable test patch can be applied to determine suitability. Surface must be dry before application.
- 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 and before inclement weather or rain. Higher humidity or lower temperatures will slow the dry time.
- 5) **APPLICATION:** This product may be applied by roller, brush, or spray. Spray applications may require masking and possible erection of wind screens to prevent over-spray damage to surrounding structures, vehicles, and other property. Be sure to apply this product at the specified coverage rate or recommended mil thickness. For larger flat roof areas, when spraying is not practical, the product can be applied with a suitable serrated squeegee and then backrolled with a 3/8" nap roller tool. Too thick of an application may result in solvent entrapment or rumpling of substrates such as EPDM. Apply one gallon per 100 square feet per coat (two coats recommended). Always check the previous coat for foreign contamination before recoating. First coat must be free from water and dry before second coat application.
- 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.
- 7) **MAINTENANCE:** Provide for routine maintenance of your roof to assure years of trouble free performance. Pondered water areas without positive flow of debris to drain where the debris is left to build up and accumulate and cycle through drying cycles can eventually cause the debris to bond to the coating and restrict the natural elongation of the coating. This can cause delaminations and tearing over substrates by preventing the coating from moving (expansion and contraction) with the substrate it is applied over. Accordingly, remove debris or flush the debris to drain as routine maintenance before it can build up and affect the coating.

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.***