

DAVLIN ROOFSEAL® 500S ACRYLIC

Technical Data Sheet | Acrylic Elastomeric Roof Coating



TECHNICAL PRODUCT DATA

1796 PSI TENSILE | 711% ELONGATION | 52% ±2 SOLIDS | 8 g/L VOC | 0.83 REFLECTIVITY

PRODUCT CHARACTERISTICS

ROOFSEAL® 500S ACRYLIC ELASTOMERIC ROOF COATING is a bright white, ultra-tough, waterproofing, copolymer elastomeric coating. The liquid-applied system forms a permanent, seamless, fully adhered, watertight membrane.

Its high solar reflectance is designed to reduce thermal-mechanical stress and cooling loads, while the high-solids formulation provides low shrinkage and helps bridge hairline cracks.

REFLECTIVE PERFORMANCE

ROOFSEAL® 500S combines 0.83 reflectivity and 0.95 emissivity in a bright white acrylic elastomeric coating. The formulation remains flexible over time and is engineered to resist weathering, ultraviolet exposure, maintenance traffic, and environmental wear.

Its copolymer elastomeric resin system produces a seamless, durable protective membrane with low shrinkage.

MANUFACTURER INFORMATION

Davlin Coatings LLC
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(800) 709-5919
www.davlincoatings.com

Made in the USA | Designed by Davlin in California

BRIGHT WHITE | ELASTOMERIC | REFLECTIVE

Water-based acrylic roof coating for properly prepared substrates

PRODUCT OVERVIEW

ROOFSEAL® 500S ACRYLIC is a single-part, water-based coating designed for high performance in coastal, temperate, humid, hot, and extreme alkaline environments. Its copolymer elastomeric resin system creates a tough, long-lasting protective membrane that remains flexible over time, even under adverse conditions.

The formulation provides resistance to maintenance traffic, weather, and wear, with exceptional weatherability and UV resistance. Because it is a high-solids coating, ROOFSEAL® 500S has low shrinkage, allowing it to bridge hairline cracks and help protect against new cracks forming.

SUITABLE SUBSTRATES

Mineral Mod. Bit

Smooth Mod. Bit

ULTRAROOF 900

SPF

Smooth BUR

Mineral BUR

Granulated Asphalt

Hot-Mopped Asphalt

Tar & Gravel

Metal / Galvanized

66%±2

SOLIDS BY WEIGHT

52%±2

SOLIDS BY VOLUME

8 g/L

VOC

0.83

REFLECTIVITY

0.95

EMISSIVITY

711%

ELONGATION

HIGH SOLAR REFLECTANCE HELPS REDUCE THERMAL-MECHANICAL STRESS AND COOLING LOADS

APPLICATION EQUIPMENT

Airless: Standard equipment such as Graco Bulldog Hydra Spray 30 or 45:1 pump with a 0.025-0.031 in. reversible fluid tip.

Conventional: Industrial equipment such as Binks 11:1 Saturn pump or equivalent with air control cut-off, a 3/4 in. minimum material hose, 1/2 in. air hose, and 50-75 psi minimum air pressure. Heavy mastic spray gun such as Binks 7E2 with 1/4 in. fluid tip or larger and slotted nozzle.

Brush or Roller: Suitable for waterborne coating. Multiple coats may be required to achieve specified DFT. Roller nap varies by substrate texture and coating thickness; typically 3/4 in. nap will work.

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PROPERTIES / SPECIFICATIONS*

Property	Test Method	Typical Value
Tensile strength (1)	ASTM D-2370	1796 psi @ 75°F
Elongation (2)	ASTM D-2370	711% @ 75°F
Tear resistance (3)	ASTM D-624	351.1
Viscosity (4)	ASTM D562	119 KU @ 75°F
Reflectivity (white)	-	0.83
Emissivity (white)	-	0.95
Permeance (US perms) (5)	ASTM D-1653	28.1
Heat stability (50°C - 10 days)	-	Very slight syneresis, pass
Water swelling (6)	ASTM D471	10.25%
Weathering / UV resistance (7)	ASTM G-154	2.49
Specific gravity	-	1.35 @ 75°F
VOC (8)	ASTM S-3960 / EPA Method 24	8 g/L
Solids by weight (9)	ASTM D-1644	66±2%
Solids by volume (10)	ASTM D-2697	52±2%
Flash point (11)	SETA	>215°F
Shelf life	-	12 months unopened, 35-75°F

COMPLIANCE / TEST METHOD NOTES

* Test methods and values are reproduced from the legacy ROOFSEAL® 500S technical data sheet.

- 1 ASTM D-2370
- 2 ASTM D-2370
- 3 ASTM D-624
- 4 ASTM D562
- 5 ASTM D-1653
- 6 ASTM D471
- 7 ASTM G-154
- 8 ASTM S-3960 / EPA Method 24
- 9 ASTM D-1644
- 10 ASTM D-2697
- 11 SETA

INSTALLATION / APPLICATION NOTES

SURFACE PREPARATION

Remove all contaminants and loose material including dust, dirt, oil, silicone, release agents, wax, mildew, salt deposits, and chalky or loose coating. Check the entire roof and thoroughly power wash it.

POLYURETHANE FOAM

Repair all cracks and holes in foam by filling with ACRYFLEX® 1210 and embedding polyester tape or fabric into wet coating. New urethane foam surfaces that require no cleaning should be coated within the time-frame recommended by the manufacturer.

APPLICATION PROCEDURE

Stir ROOFSEAL® 500S until uniformly blended, but avoid excessive mixing to prevent air entrapment. Flush equipment with water before use. Apply a wet coat in even, parallel passes, overlapping each pass 50% to avoid holidays, bare areas, and pinholes. Cross-roll or spray at a right angle to the first pass.

SYSTEM APPLICATION

Apply 1 coat at 1 gallon per 100 square feet for 8 mils DFT. Allow 4-8 hours to dry. Use the rule-of-thumb test before the next coat: when one's thumb is pressed firmly into the coating, none should adhere. Apply second, third, and fourth coats per system specifications. Roofing granules may be broadcast into the final coat at 35-40 ounces per 100 square feet.

LIMITATIONS

Do not apply to exterior below-grade surfaces or when a vapor barrier is required. Do not thin. Ideal application temperature is 50-80°F. Above 80°F, thinner coats are recommended because a normal coat may skin over while material beneath remains wet, resulting in blisters. Consult Davlin above 100°F. Do not apply below 50°F or during, nor 24 hours preceding, inclement weather including fog, mist, or freezing temperatures. Protect from freezing during shipment and storage. Do not store below 50°F.

CLEANUP

Clean all equipment with detergent and water.

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