April 2013

BITEC BITUMEN TECHNOLOGY TM

IMPER-SOL™

PRODUCT CODE F02467

PRODUCT DESCRIPTION

IMPER-SOL™ is a white, non-toxic, fire retardant roof coating formulated from water-based, pure acrylic, self-curing latex polymers. IMPER-SOL™, an elastomeric coating, also contains unique "bleed-blocking" polymers that make it very suitable for use over asphaltic surfaces.* It is designed for application by brush, roller or spray. Once cured, IMPER-SOL™ preserves asphaltic or modified bitumen surfaces and reduces under roof temperatures to create a more pleasant interior work environment that is less costly to maintain. IMPER-SOL™ is an approved product under CRRC®, and meets Title 24 requirements.

PRODUCT ADVANTAGES

IMPER-SOL™ contains substantial levels of UV-blocking pigments that keep solar heat out of the building envelope. A cool IMPER-SOL™ surface reflects the sun's ultraviolet rays, slows down roof aging, and extends the useful life of a roofing system.

Fire Retardant - IMPER-SOL™ contains a unique blend of ingredients that produce a superior, flame-retardant surface. Refer to UL and FM publications in order to determine how IMPER-SOL™ should be used with a specific roof system or assembly. IMPER-SOL™ contains no asbestos.

Reduces Roof Degradation - Solar heat accelerates roof system degradation. In addition, roofing materials contract and expand daily as they heat up during the day and cool at night. A roof coated with IMPER-SOL™ does not experience such large temperature fluctuations; therefore, the roofing system undergoes less fatigue. Its white, flexible finish reflects the sun's ultraviolet rays and reduces their damaging effects.

Energy Savings - Typical dark colored Built-Up Roofs can absorb over 70% of the solar energy that reaches them, creating temperatures over 180°F (82.2°C). Studies confirm that IMPER-SOL™ can reduce roof temperatures by 50° to 80°F (10° to 26.7°C) and save significant amounts of cooling energy during the summer months.

Environmentally Friendly - IMPER-SOL™ eliminates flammability and toxicity hazards associated with solvent based coatings. There are no irritating or unpleasant odors with IMPER-SOL™ .

Reduces Roof Life-Cycle Costs - Over time, heat and UV light degrade the chemical structure of a roofing membrane, which then causes chalking, cracking, shrinking, loss of flexibility, and surface erosion. High-quality acrylic polymers give IMPER-SOL™ added strength, flexibility, adhesion, and color-retention to aged roofing systems.

APPLICATION

The existing roof surface must be sound and free of defects such as blisters, splits, fishmouths, etc. All defects must be repaired with a suitable patching material. All fresh applications of mastics, coatings or asphalt adhesives require a minimum of 30 days to cure prior to application of IMPER-SOL™. Loose materials, standing water, debris, oil, and other contaminants may prevent full adhesion of the coating and must be removed. IMPER-SOL™ is designed for application by brush, roller or spray. The coating is ready for immediate use; however, it should be stirred, not thinned, prior to application.

IMPER-SOL™ should be spray, brush or roller applied at a rate of 1½ gallons per 100 ft^2 (0.41-.61 l/m^2) per coat depending on the substrate. For best results, apply a two-coat application in a crosshatch manner.

PRECAUTIONS

- Do not apply when the ambient temperature is below 50°F (10°C) or above 95°F (35°C).
- Do not use on roof areas subject to ponding water.
- Do not apply when rain is expected within 12 hours.
- Do not allow product to freeze.
- Store material in dry protected areas and on clean raised platforms.
- Shelf life is one year in an unopened container.

All safety and good roofing practices should be followed while applying this product. IMPER-SOL™ should be installed by a professional roofing contractor having previous experience in the application methods described. Dispose of unused portions and empty containers in accordance to local regulations.

*APP polymer modified bitumen; smooth surface membranes are susceptible to exuding light oils, which can cause the coating to turn brown or discolor after application. It is highly recommended a period of 30 to 45 days lapse prior to applying IMPER-SOL™ to smooth APP polymer modified bitumen membranes.

Specifications on back side

IMPER-SOL™

Technical Data	IMPER-SOL™
Color	White
Weathering (ASTM D 4798)	No deterioration over 1000 hours per ASTM G 26 test requirements
Non-Volatile (ASTM D 1644)	66% min
Density @ 77°F (25°C) (ASTM D 1475)	12 lb./gal (1.43g/cm^3)
Elongation (ASTM D 2370)	100% minimum
Tensile Strength (ASTM D 2370)	200 psi minimum
Toxicity	Non-toxic; Water based
Shelf Life	1 yr. in an unopened container
Coverage	1-1.5 gal./100 ft.^{2} (0.41-0.61 l/m^2) per coat, 2-coat application required
Packaging	5 gallon pail (18.9 l) 55 gallon drum (208.2 l)

Eco-Facts	IMPER-SOL™
VOC	<50 g/l
	Initial
Emittance	.84
Reflectance	.91
SRI	106

Information contained herein is accurate as of the date of publication. BITEC, INC. reserves the right to change, modify and/or discontinue this product without prior notice to the consumer. Test data, classification and approval of this product may also change without prior notice. It is the sole responsibility of the consumer to use this product in accordance to good roofing practices, local codes, and environmental regulations. The consumer is solely responsible for determining the suitable end-use of this product prior to purchase and application. Statements made herein are not given as a warranty either expressed or implied. Any questions regarding this product shall be directed to BITEC, INC. Technical Department, 800-535-8597. IMPER-SOL™ is a trademark of BITEC, INC.

CLASSIFIED UL — Roofing Systems Component for Material Characteristics in Accordance with ASTM D4586-0045P1

FM APPROVED

Tests verified by independent laboratories. Actual roof performance specifications will vary depending on test speed and temperature. Data reflects samples randomly collected. A ± 10% variation may be experienced. The above data supersedes all previously published information. Consult your local BITEC Representative or BITEC Corporate Office for more information.

BITEC BITUMEN TECHNOLOGY™

Visit our web site at www.bi-tec.com

MANUFACTURERS OF ADVANCED TECHNOLOGY WATERPROOFING MEMBRANES

P.O. Box 497 • No. 2 Industrial Park Drive • Morrilton, Arkansas 72110 • Fax (501) 354-3019 • Phone 1-800-535-8597