

## PRODUCT DATA SHEET

APV eCoolRoof®  
Cool White Roof Topcoat  
**P-1494**

### PRODUCT DESCRIPTION:

APV eCoolRoof® with Kynar Aquatec® Topcoat is a white, water-based coating engineered to dramatically increase the emissivity and total solar reflectance properties of a roof's surface. Studies have shown energy savings as much as 63%\*! The coating system is designed to reduce energy absorption into buildings and restore aged roof surfaces, which can be warranted to up to 15 years. APV eCoolRoof is rated by the Cool Roof Rating Council (CRRC) and is qualified for Energy Star and Title 24.

Along with reduced energy absorption, APV eCoolRoof® with Kynar Aquatec® Topcoat is highly resistant to stains, dirt pickup, plasticizer migration, color/gloss degradation, abrasions, and algae/fungal growth throughout its 20 year lifecycle. The coating is also water-based and low in VOCs. With its proven performance, APV eCoolRoof® with Kynar

Aquatec® delivers a number of sustainable, practical and eco-friendly benefits for property owners, contractors, builders, architects, and building product manufacturers.



Natural elements, such as sunlight, water, wind, and air, drastically break down coatings over time. The heart of the Kynar Aquatec® emulsion technology, the key ingredient in the APV eCoolRoof® Topcoat is the carbon-fluorine (C-F) bond. The C-F bond is one of the strongest bonds known and it is the basis for extreme weatherability, withstanding harsh thermal, chemical, and ultraviolet environmental conditions.

### PHYSICAL PROPERTIES (ASTM D-6083):

Product Type:		Water-Based
Color:		White
Volume Solids:	ASTM D-5201	43.21% ± 2.0
Weight Solids:	ASTM D-2368	53.91% ± 2.0
Viscosity:	ASTM D-562	95-105 KU
Weight Per Gallon:	ASTM D-1475	10.5 lbs. ± .5 lbs.
Permeance:	ASTM E-96	< 1.0
Elongation:	ASTM D-412	>200
Fungi Retention:	ASTM D-4214	Zero
Chalking:	ASTM D-421	Zero
Gloss Retention:	ASTM D-523	>85%
Tear Resistance:	ASTM D-624	21.3 kN/m
Water Swelling:	ASTM D-471	<15%
UV Resistance:	ASTM G-155	Pass (1000 hours)
Gloss @ 60°	ASTM D-421	50-65
Flash Point:		>200 °F (93 °C)
Dry Time:		6 hours @ 75°F
VOC:	EPA 23	Wet: .35 lb/gal (41.97g/L) Dry: .69 lb/gal (82.74g/L)
Shelf Life:		1 year, unopened

### SUBSTRATES:

APV eCoolRoof Coating System is recommended for use over a number of different substrates including PVC, EPDM, TPO, Metal, Modified Bitumen (including APP & SBS), Concrete, and Polyurethane Foam. Other substrates are acceptable, contact APV Engineered Coatings' Technical Department for approval and application specifications.

### FEATURES:

PVDF Technology

High Reflectivity Properties

Reduces Energy Costs

Lowers Indoor Air Temperatures

Prolongs the Life of the Roof

Exceptional Resistance to UV Degradation

Resistant to Algae & Fungal Growth

Resistant to Abrasion

Self-Cleaning

Resistant to Staining

Resistant to Chemicals (i.e. Acid Rain)

Long-term Color & Gloss Retention

Water-Based

Low VOC Content

Easy Application

Non-Hazardous

## CHEMICAL RESISTANCE (ASTM D-1308):

CHEMICAL AGENT	RESULT	DURATION	NOTES
Gasoline	Pass	4h	Softened, Recovered after 24 hrs
Hydraulic Fluid	Pass	4h	No Effect
Antifreeze	Pass	4h	No Effect
Motor Oil	Pass	4h	No Effect
Degreaser	Pass	4h	Softened, Recovered after 24 hrs
DI Water (25C)	Pass	4h	No Effect
DI Water (75C)	Pass	4h	No Effect
Hand Soap	Pass	4h	No Effect
Spic and Span	Pass	4h	No Effect
10% Dishwashing Detergent	Pass	4h	No Effect
Vegetable Oil	Pass	4h	No Effect
Bleach	Pass	4h	No Effect
Acetone	Pass	1h	Softened, Recovered after 24 hrs
Butyl Acetate	Pass	1h	Softened, Recovered after 24 hrs
Xylene	Pass	1h	Softened, Recovered after 24 hrs
MEK	Pass	1h	Softened, Recovered after 24 hrs

### SURFACE PREPARATION:

The surface preparation is key to the performance of the coating system. Different substrates require different preparation; refer to the specific application specification for the substrate to be coated regarding the proper primer and cleaning procedures. Ponding water is defined as water standing 48 hours after a rain fall. If ponding water is present, the installation of additional drains or creating slope to the drains will need to be addressed.

### APPLICATION:

Refer to the specific application specification for the substrate to be coated. The preparation and cleaning of the specific substrate is key to the performance of the coating system. APV eCoolRoof® Topcoat should be thoroughly mixed prior to use. Also, refer to the application specifications for the proper procedures and final mil thickness of the coating system, which are based on the warranty requirements for the project. Prior to applying the topcoat, all surfaces must be clean, dry, and free of blisters prior to application. If any dirt or particles are detected on the surface of the basecoat, be sure to completely remove the contaminants before applying the topcoat.

### PACKAGING:

APV eCoolRoof® with Kynar Aquatec® Topcoat is a ready-to-use product. Packaging sizes include: 5 gallon pails and 55 gallon drums.

### CLEANUP INFORMATION:

Clean hands immediately after use with soap and water. Use water to thoroughly clean application equipment. This will keep the coating from curing onto the surfaces. Any cured or dried coating left on the equipment will have to be removed with standard grade paint thinner. After cleaning, flush spray equipment with water or a water/solvent blend. Always observe good professional hygiene practices and wash hands thoroughly after using this product.

### CAUTIONS:

In case of spill, absorb with a dry inert material and dispose of in accordance with local or state ordinance. Always use with adequate ventilation and proper NIOSH approved respirator. Avoid breathing mist or sanding dust created by the application. Always dispose of the dry, empty containers in compliance with local or state regulatory codes. First Aid: In case of eye contact, flush with water for 15 minutes. In case of skin contact, wash with soap and water. If you experience difficulty breathing, seek a fresh air source. In all cases, if you continue to experience discomfort, seek medical attention immediately. APV eCoolRoof® with Kynar Aquatec® Topcoat is has a glossy sheen which can be slippery, especially when wet. Please use caution when walking on a roof under such conditions. For professional use only. For external use only. Protect from freezing. Do not take internally. Keep out of reach of children. Refer to the Material Safety Data Sheet for safety instructions.

\*Derived from a study published by Lawrence Berkeley National Laboratory in collaboration with Arkema, Inc. on energy savings and greenhouse gas reduction.

NOTE: The information and data given herein are based upon tests and reports considered reliable and are believed to be accurate. However, due to varied application and handling methods, no guarantee of duplicate performance, expressed or implied, is made.

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