POLYBRITE® 35 CA

CLIMATE ARMOR - HIGH TEMPERATURE ELASTOMERIC PROTECTIVE COATING

PRODUCT DESCRIPTION

PolyBrite 35 CA is a tough, superior quality water-based elastomeric coating. This proprietary formulation uses a high-tensile strength 100% acrylic resin that cures to form a seamless fluid applied armor over approved roofing substrates. PolyBrite 35 CA can be applied as either a base or top surface coating. This product has excellent adhesion to sprayed polyurethane foam (SPUF) and a variety of other construction and roofing substrates and exceeds the tensile strength of typical acrylic roof coatings.

PolyBrite 35 CA is specifically formulated for hot dry climates, provides superior durability and dirt pickup resistance.

PolyBrite 35 CA protects against damaging ultraviolet rays, due to its high reflectance properties, keeping the roof surface cool in high temperatures that result in reduced building energy costs. PolyBrite 35 CA exceeds the minimum requirements of ASTM D6083 Type I and II forming a highly durable protective layer extending the life of the roofing system assembly.

USES

 Approved over smooth and granulated BUR, SPUF, most metal roofs, modified bitumen membranes, concrete, exterior grade plywood rigid cover boards, and single-ply membranes. (May require a primer depending on age and condition.) A substrate adhesion test is recommended prior to product application.

FEATURES AND BENEFITS

- Better hail resistance than typical elastomeric roof coatings.
- Excellent toughness to withstand foot traffic and routine rooftop maintenance activities.
- Easy application due to exceptional product flow.
- Superior wet and dry hide.
- Offers excellent resistance to extended exposure to solar ultraviolet energy.
- UV resistant
- By decreasing roof surface temperature, PolyBrite 35 CA can reduce energy costs.
- Initial Solar Reflectance: 0.86
- Initial Thermal Emittance: 0.89
- Initial SRI: 109
- Offers high tensile strength and elongation.
- Resistant to dirt pick up.
- Fungal and algal resistant even in high temperatures.
- Low VOC, non-flammable and presents minimal hazard to the applicator or the environment.

TYPICAL PHYSICAL PROPERTIES - Compliant to ASTM D6083 Type I and II

TEST PROPERTY	TEST VALUE	TEST PROCEDURE
Accelerated Weathering @ 1000 hr. (pass/fail)	Pass	ASTM D4798
Low Temp Flexibility (½" mandrel@-26°F)	Pass	ASTM D522B
Permeance (US perms)	9	ASTM D1653
Fungi Resistance (Pass/Fail)	Pass	ASTM G21
Elongation (%) (Initial)	650 ± 50	ASTM D2370
Tensile Strength (psi) (Initial)	570 ± 50	ASTM D2370
Adhesion (pli) (Dry)	Pass	ASTM D6083
Solids Weight (%)	62 ± 2	ASTM D1644
Solids Volume (%)	52 ± 2	ASTM D2697
Hardness (Shore A)	71 ± 5	ASTM D2240
Viscosity (cPs)	40,000 Nominal	ASTM D2196 Brookfield®4d/5RPM/77°F
Tear Resistance lbf./in)	105 ± 5	ASTM D624
Weight Per Gallon	10.8 ± 0.3	ASTM D1475
Water Swell (%)	12 ± 1	ASTM D371
VOC (g/l)	< 50	Calculated
Flammability	N/A Water Based	
Application Types	Spray/Brush/Roll	
Application Temperature	50°F and Rising	







APPLICABLE STANDARDS

- Meets or exceeds the requirements of ASTM D6083 (Type I and Type II) Standard Specification for Liquid Applied Acrylic Coating Used in Roofing.
- UL Classified File #R14571
- FM Approved
- ICC ESR-4038
- Meets the requirements of California Energy Commission (CEC) Title 24 Section 110.8 (i)4 (White only)
- CRRC Listed (White only)









PACKAGING

- 5 Gallon (18.9 Liters) Pail
- 55 Gallon (208 Liters) Drum
- 250 Gallon (946 Liters) Tote

COLORS

White, Kool Grey and Tan

Note that when using this product as part of the Stick 'N' Coat System, the system is designed for installation in hot/dry climate zones (ASHRAE 90.1 Climate Zones 1b & 2b). For installations in areas outside those climate zones, please call Polyglass Technical Services.





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77	Rated Product ID #: 0616-0038		
CRRC Solar Reflectance		Smooth	Rough
		Initial / Aged	Initial / Aged
	Solar Reflectance	0.86 / 0.79	Not Rated
RATING COUNCIL ®	Thermal Emittance	0.89 / 0.88	Not Rated

The ratings above are subject to CRRC rating program conditions, requirements and limitations. Visit coolroofs.org for important information and disclaimers about CRRC rating requirements and limitations. For the purposes of a CRRC rating, a rough substrate is defined as a surface that is equally coarse or coarser than a new (i.e., unweathered) #11 granulated modified bitumen sheet.

Solar Reflectance Index (SRI) - Initial: 109 • Aged: 98

APPLICATION INSTRUCTIONS

Surface Preparation:

- All surfaces to receive coating must be clean, dry, and free from any
 foreign matter such as dirt, oils, grease, or other debris that could
 inhibit the adhesion capabilities of the newly installed products. Metal
 surfaces that display rusting or other oxidation, to be prepared with a
 grinder or wire brush as needed to remove surface contaminants.
- Visually inspect existing roof systems for conditions that may adversely affect adhesion of performance of newly installed products. Repair any visible deficiencies such as splitting, blistering, and buckling with PolyBrite 72 or PolyBrite 73 Elastomeric Mastic and PolyBrite Polyester Fabric.
- Repair metal and non-metal flashings, edges, drains, valleys, and through-roof penetrations.
- Do not apply to wet or visibly damp surfaces or surfaces previously covered with coal tar-based products or Kynar® finishes.
- Concrete surfaces cured with wax/resin-based compounds can inhibit adhesion.

Application:

- Stir well prior to application. To field tint this product, please use a water-based, exterior-grade pigment.
- Apply with high pressure sprayer for best appearance and coverage, however the product may be applied by roller or brush applications.
- Apply at 24 wet mils (1.5 gallon per 100 square feet) per coat.
 Typical application conditions require two coats at 24 wet mils per coat. To minimize potential voids or pinholes in coating application, apply second coat perpendicular to the first.
- Allow coating to dry overnight prior to applying second coat.
- Apply only when ambient temperatures are 50°F and rising. Cold weather could result in uneven application and improper curing of product. Do not apply if there is a threat of inclement weather within 24 hours of application.
- Do not thin product. Do not heat outside of container. Do not apply at temperatures greater than 120°F.
- Prior to using this product on new cap sheets (smooth or granulated), it is recommended to wait 30 days for weathering.

Spray Equipment:

PolyBrite 35 CA can be applied by conventional airless spray equipment designed for the purposes of field application of fluids, paints and coatings. The following minimums are recommended:

Pump: 1 gal/min output; 2,000 psi

Gun/Tip: Airless handgun. Reversible tip with orifice sizes ranging from .027–.039.

Hose: Minimum inside diameter of high-pressure nylon hose of 3/8". Refer to equipment manufacturer product guidelines.

Storage and Cleaning:

- Shelf life is 18 months if stored in original unopened containers.
- All containers should be sealed when not in use.
 - Keep from freezing.
 - Store between 40°F and 100°F.
- Observe normal safeguards for storing and handling of this product prior to and during application.
- Clean equipment and overspray with water.
- Clean hands with waterless hand cleaner.
- Application tools and equipment can be cleaned with lukewarm water and soap, followed by a rinse of isopropanol, acetone, or Simple Green®. Recirculate through lines and gun until residual coating is removed.
- DO NOT USE MINERAL SPIRITS, XYLENE, TOLUENE, OR VMP & NAPTHA SOLVENTS.

For Professional Use Only - Keep out of the reach of children.

MANUFACTURING FACILITIES

- Fernley, NV
- Hazleton, PA
- Phoenix, AZ
- Waco, TX
- Winter Haven, FL

CORPORATE HEADQUARTERS

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Technical Service: (866) 794-9659

Questions? technical@polyglass.com

Product Disclaimer: Unless otherwise incorporated into or part of a supplemental manufacturer's warranty, Polyglass warrants its product(s) against manufacturing defects that result in the material not complying with product specifications for a period of 12 months.

Refer to safety data sheet (SDS) for specific data and handling of our products. All data furnished refers to standard production and is given in good faith within the applicable manufacturing and testing tolerances. The product user, and not Polyglass, is responsible for determining the suitability and compatibility of our products for the user's intended use.

For the most current product data and warranty information, visit www.polyglass.us

