

# POLYBRITE® 90.1

## HIGH SOLIDS SILICONE ROOF COATING

### PRODUCT DESCRIPTION

PolyBrite 90.1 is a premium grade high solids, moisture cure, liquid applied silicone coating which cures to form a seamless membrane when applied over the entire roof area. It also keeps the surface cool, providing protection from ultraviolet sun and other weather exposures.

### USES

- Protect and waterproof a variety of roof surfaces.
- Designed for use on existing smooth surface BUR, granulated cap sheets, well adhered acrylic coatings, concrete, metal, sprayed in place polyurethane foam (SPF) and various single-ply roofing membranes.
- PolyBrite 79 Primer can be used to enhance adhesion to TPO.
- PolyBrite 98 Primer can be used to enhance adhesion to granulated modified Bitumen membranes, wood and masonry.
- PolyBrite 97X Primer can be used to enhance adhesion to most metals, organic polymers, wood and masonry.
- A substrate adhesion test is recommended before each product application.
- Contact Polyglass Technical Services for clarification of unusual surfaces or project conditions.

### FEATURES AND BENEFITS

- Excellent resistance to weathering including: UV radiation, extreme temperatures, as well as rain, ice and snow.
- Extends the useful life of the roof.
- PolyBrite 90.1 can reduce energy costs by decreasing roof surface temperature.
- Fungal and algal resistant – even in high temperatures.

### TYPICAL PHYSICAL PROPERTIES

TEST PROPERTY	TEST VALUE	TEST PROCEDURE
Accelerated Weathering @ 5000 hr (pass/fail)	pass	ASTM D6694
Permeance (perms)	10.7	ASTM E96 (procedure B)
Elongation (%)	237	ASTM D412
Tensile Strength (psi)	247	ASTM D412
Hardness (Shore A)	87	ASTM D2240
Solids Volume (%)	92 ± 3	ASTM D2369
Temperature Stability Range (°F)	-35 to 212	
Tack-free time (hrs, subject to temp/humidity)	1 – 2	
VOC (gm/l)	< 50	Calculated
Flash Point (°F)	141	PMCC
Initial Solar Reflectivity	89	ASTM C1549
Initial Thermal Emissivity	90	ASTM C1371
SRI Value	113	Calculated



### APPLICABLE STANDARDS

- Meets or exceeds the requirements of ASTM D6694 Standard Specification For Liquid-Applied Silicone Coating.
- UL Classified - File #R14571
- FM Approved
- Meets the requirements of California Energy Commission (CEC) Title 24 Section 110.8 (i)4 (White only)
- CRRC Listed. (White only)
- NSF Protocol P151 - Health Effects from Rainwater Catchment System Components. See listing at [www.nsf.org](http://www.nsf.org) for application and cure instructions for rainwater catchment use.
- Texas Department of Insurance
- Florida Building Code
- Miami-Dade County Product Control Approved




### PACKAGING

- 5 Gallon (18.9 Liters) Pail
- 55 Gallon (208 Liters) Drum

### COLORS

Standard colors are White, Light Grey, Dark Grey, and Tan.



	<b>Rated Product ID #: 0616-0030</b>		
		<b>Smooth</b>	<b>Rough</b>
	<b>Solar Reflectance</b>	<b>Initial / Aged</b> <b>0.89 / 0.73</b>	<b>Initial / Aged</b> <b>Not Rated</b>
	<b>Thermal Emissivity</b>	<b>0.89 / 0.88</b>	<b>Not Rated</b>

The ratings above are subject to CRRC rating program conditions, requirements and limitations. Visit [coolroofs.org](http://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: 112 • Aged: 89**



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### PONDING WATER

The chemistry of silicone, which Polyglass Silicone roof coatings are manufactured with, is not adversely affected by ponding water or prolonged rain exposure. Please be advised that good roofing practices, Building Codes and The National Roofing Contractors Association (NRCA) consider ponding water on any roof undesirable and recommend that all roof systems be designed and built to ensure positive drainage (See the NRCA Roofing and Waterproofing Manual and any applicable Code Ordinances).

### APPLICATION INSTRUCTIONS

#### Surface Preparation:

- Surfaces to be coated with PolyBrite 90.1 must be properly prepared. All surfaces must be clean dry and free of loose particles.

#### Application:

- Stir well prior to application.
- PolyBrite 90.1 is recommended to be applied with high pressure sprayer for best appearance and coverage. It may also be applied by roller or brush applications.
- PolyBrite 90.1 can be applied in excess of 40 mils in a single coat without blistering, while maintaining maximum adhesion.

#### Application Equipment:

Due to the high viscosity of the material, a high-pressure airless paint pump capable of producing 3500 PSI should be used. The pump should have a minimum of 3 gallons per minute output. Always use components rated for pump pressure. Hoses should be BUNA-N jacketed for prevention of moisture contamination. Hoses should have a minimum I.D. of 3/4" and an adequate working pressure. The spray gun should be high pressure (5000 PSI) with reverse-a-clean spray tip, having a minimum orifice of .030 and a 50° fan tip.

**DO NOT USE** hose that has been used for Acrylics or other waterborne coatings as the liner absorbs moisture and initiates the silicone cure process.

#### Storage and Cleaning:

- Shelf life is 24 months from date of manufacture when stored in the original unopened container between 40°F and 80°F.
- Observe normal safeguards for storing and handling of this product prior to and during application.
- Keep containers closed and sealed when not in use.
- Uncured silicone coating can be cleaned, and equipment can be flushed with VM&P Naptha or mineral spirits.
- PolyBrite 90.1 cures by reacting with moisture and should not be left in spray guns, pump equipment and hoses for prolonged periods unless equipment contains moisture lock hoses, fittings, and seals. Equipment without these will transmit sufficient moisture vapor to gradually form cured material on hose walls and at unsealed connections potentially causing an increase in operating pressure and material flow restriction.

**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

Polyglass U.S.A., Inc.  
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Deerfield Beach, FL 33442

[www.polyglass.us](http://www.polyglass.us)

General Line: (888) 410-1375  
(954) 233-1330

Customer Service: (800) 222-9782  
Technical Service: (866) 794-9659

**Questions?** [technical@polyglass.com](mailto: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](http://www.polyglass.us)**

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