# POLYBRITE® 90.2 HIGH SOLIDS SILICONE ROOF COATING

#### **PRODUCT DESCRIPTION**

PolyBrite 90.2 is a premium grade high solid, moisture cure, liquid applied silicone coating available in White or Light Grey, 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.
- Suitable for use on sprayed polyurethane foam, most metal roof systems, concrete, Thermoplastic and Thermoset single-ply membranes, various conventional BUR and polymer modified roof membranes with smooth and mineral surfacing.
- 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**

- Can be applied in one coat
- Extends the useful life of the roof
- Ponding water resistant
- Fungal and algal resistant even in high temperatures
- Non-flammable

## **TYPICAL PHYSICAL PROPERTIES**

TEST PROPERTY	TEST VALUE	TEST PROCEDURE
Accelerated Weathering @ 5000 hrs. (pass/fail)	Pass	ASTM D6694
Permeance (perms)	4.44	ASTM E96 (procedure B)
Elongation (%)	300 ± 25	ASTM D2370
Tensile Strength (psi)	325 ± 50	ASTM D2370
Hardness (Shore A)	40	ASTM D2240
Viscosity (cP)	4,100 ± 1,000	Brookfield© 4d/5 RPM/77°F
Weight/gal (lb)	12.72	ASTM D2939
Solids Weight (%)	97	ASTM D1644
Solids Volume (%)	94	ASTM D2697
Temperature Stability Range (°F)	-60	
Tack-free time (hrs., subject to temp/humidity)	1 hr.	ASTM D3960
VOC (gm/l)	< 50	Calculated
Flash Point (°F)	190.4	PMCC
Tear Resistance (lbf/in)	22	ASTM D624 die B
Specific Gravity	1.32	

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	Smooth	Rough	
	Initial / Aged	Initial / Aged	
COOL ROOF	Solar Reflectance	0.85 / 0.72*	Not Rated
RAPID RATINGS Thermal Emittance	0.89 / 0.89*	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. \*CRRC Rapid Ratings: Interim laboratory-aged values that simulate naturally-aged values and will be replaced by the measured three-year naturally-aged values upon completion of the weathering process.

Solar Reflectance Index (SRI) – Initial: 106 • Aged: 89\* Copyright @2024 by Polyglass U.S.A., Inc. and all rights are reserved. Edition Date: 04/24 • Doc# PolyBrite 90.2



#### **APPLICABLE STANDARDS**

- Meets or exceeds the requirements of ASTM D6694 Standard Specification Liquid-Applied Silicone Coating.
- UL Classified File #R14571
- CRRC Listed. (White only)



#### PACKAGING

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

### COLORS

White and Light Grey





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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:**

- 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.
- Existing roof systems to be visually inspected for conditions that may adversely affect adhesion of performance of newly installed products. Repair any visible deficiencies such as splitting, blistering and buckling with an Elastomeric Mastic and PolyBrite Polyester Fabric.
- Visually inspect all metal and non-metal flashings, edges, drains, valleys and through-roof penetrations and repair as needed by project conditions.
- 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.
- PolyBrite 90.2 is recommended to be applied with high pressure sprayer for best appearance and coverage. It may also be applied by roller or brush applications.
- Apply PolyBrite 90.2 at 20 wet mils (1.25 gallon per 100 square feet) per coat. Typical application conditions require PolyBrite 90.2 be applied at 20 wet mils. Apply 1 or 2 coats to meet the minimum requirements for the desired warranty. Consult Polyglass Technical Services for application rates for specific roof membranes and for job specific application specifications.
- Subsequent coats should be applied within 24 hours of prior applications to insure full and uniform adhesion. Coating must be evenly applied and pinhole-free. Before applying a subsequent coat of this product, the previous coat must be completely dry and cured. Apply second coat perpendicular to the first.
- 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 4 hours of application. Drying time is dependent on temperature, humidity, and film thickness.
- Do not thin product.
- Prior to using this product on new cap sheets (smooth or granulated), it is recommended to wait 30 days for weathering.

#### **Application Equipment:**

Due to the high viscosity of the material, a high-pressure airless paint pump capable of producing 5000 PSI should be used. The pump should have a minimum of 2.5 gallons per minute output and be fed by a 5:1 transfer pump to prevent cavitation. 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 <sup>3</sup>/<sub>4</sub>" and an adequate working pressure. The spray gun should be high pressure (5000 PSI) with reverse-a-clean spray tip, 0.029–0.035 and a 50° fan tip. Any filters on spray rig or gun should be removed. Filters are required when applying fine finishes but not for roof coatings. **DO NOT USE** has 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 12 months from date of manufacture when stored below 90°F in the original unopened container.
- 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 90.2 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, TXWinter Haven, FL

# CORPORATE HEADQUARTERS

Polyglass U.S.A., Inc. 1111 West Newport Center Drive Deerfield Beach, FL 33442 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

**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

