



Technical Data Sheet for ***Silicone Coating 820***

DESCRIPTION

A ready-to use, high solids, single component, solvent borne, moisture cure silicone coating. Breathable membrane for superior weathering.

Recommended Uses

Provides elemental protection for architectural surfaces such as vertical walls, masonry, concrete, metal, single ply roof membranes and sprayed-in-place urethane foam systems.

Product Limitations

Not recommended for continuous immersion service, for use in cryogenic tank, or cold storage roofing applications without a vapor barrier, or directly over Modified Bitumen, Asphalt or Coal Tar Built-Up roofing systems without a sealer. Note: PolyGreen Solutions recommends any subsequent coats of silicone be completed within 48 hours to ensure good adhesion of the silicone to the previous coat.

Flammability Characteristics

SC-820 meets Class “A” Non-Combustible and Class “B” Combustible credentials as tested under UL 790 procedures over spray foam and single ply roofing systems.

TYPICAL PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	RESULT
Tensile Strength	ASTM D-412	551 psi @ ± 25
Elongation	ASTM D-412	188% @ ± 10
Tension Set @ 100%	ASTM D-412	0%
Permeability	ASTM E-96	7.9
Initial Solar Reflectivity	ASTM C-1549	87
Temp. Stability Range		-35°F to 212°F (-37°C to 100°C)
Water Absorption	ASTM D-570	0.2
Weathering/UV Resistance	ASTM G-154 QUV	No Degradation after 5,000 Hrs.
Specific Gravity	@ 77 F	1.31
Tack Free Time		10 to 20 minutes
VOC (EPA Method 24)	ASTM D-3960	<246 Grams/Liter
Durometer Hardness	Shore A	70± 5 points
Solids Content by Weight	ASTM D-1644	82% ± 2
Solids Content by Volume	ASTM D-2697	69% ± 2
Max. Continuous Service Temp.		185°F (85°C)
Initial Thermal Emissivity	ASTM C-1371	>115°F
Cure Time		1-3 Hrs. Depending Upon Temp.
Drying Time		30-60 Min. @ 77°F
Shelf Life	Unopened Containers	6 Mos. When Stored Between 35°F & 75°F

APPLICATION PROCEDURES

This product may be applied directly to any clean, dry surface. Polyurethane foam should be coated within 24 hours of application. Subsequent coats should be applied within 48 hours of prior applications to insure full and uniform adhesion. Coating must be applied in 2 or 3 separate applications of contrasting colors, each applied at right angles to the previous coat. 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. If any contamination of a thoroughly cured surface occurs, it must be washed with a chemical cleaner before applying subsequent coats. Coating must be extended beyond the substrate to create a self-terminating flashing. Consult PolyGreen Solutions for recommended dry film thickness. Due to the bond agent present in all coating, colors may be used as either a base or a topcoat. The coating will cure in 2-6 hours, dependent on weather conditions (such as temperature and humidity), after which another coat can be applied. A #11 ceramic roofing granule may be installed in the topcoat to improve aesthetics, traffic resistance and impact resistance.

RECOATING PROCEDURES

This product may be used to re-coat existing spray-in-place roofing systems. The surface to receive recoat must be thoroughly cleaned using power scrubber, pressure washer, chemical cleaners, or air wand. Surface must be completely dry before applying re-coat.

SURFACE PREPARATION

All surfaces to be coated must be clean, dry, and paintable. It may be necessary to power wash and/or prime to enhance adhesion. See application specification for more details.

MIXING PROCEDURES

No thinning or reducing is necessary. Product may separate after shipping and storage, though it may still look mixed. When mixing becomes necessary we recommend the use of a 3/4 horsepower or larger air operated mixer with a blade capable of uniformly mixing the entire container. When product is in 5-gallon pails use a 3" minimum diameter-mixing blade, or hand mixing with a suitable blade is acceptable. When product is in drums, use a 6" minimum diameter-mixing blade. Containers are packaged with a layer of dry nitrogen gas, to keep latent moisture from prematurely starting the curing process. After opening a container, try to use it up as soon as possible, or reseal with a layer of argon or nitrogen gas. **Caution:** Due To The Combustible Nature Of This Product, Do Not Use An Electric Mixer.

WEATHER RESTRICTIONS

It is not recommended that this product be applied at temperatures below 50° F. (10° C.), or if rain is expected within 1 hour of application. WLS-680 may be applied at lower temperatures; however the cure time will be extended.

APPLICATION EQUIPMENT

This product may be sprayed, brushed, or rolled. Due to the high viscosity of the material, a high-pressure airless paint pump capable of producing a minimum of 3500 PSI at the spray gun head should be used. The pump should have a minimum of 3 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 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.

Shipping Information

<u>Container Size</u>	<u>Gross Weight</u>	<u>Class</u>
5 Gal (18.9 Liter)	54 Lbs.	55
50 Gal. (208.2 Liter)	542 Lbs.	55

D.O.T. Classification: **Roof Coating, Not Regulated**

HMI: **Health** 2 **Flammability** 2 **Reactivity** 0 **Protection** X

SAFETY PRECAUTIONS

This product contains combustible solvents. Keep coating material and cleaning solvents away from all sources of heat, sparks, flame, lighted smoking materials, or any other ignition source. Pumping equipment should be grounded to avoid accidental ignition due to static sparks. Avoid breathing solvent vapors. Use an appropriate MESA/NIOSH approved respirator when exposure can exceed recommended PEL. This product is not recommended for interior use. Additional care must be taken to prevent roof top HVAC equipment from introducing evaporating solvent into interior areas during application. Building occupants should be warned of spray operations in process. Installers should exercise caution during spray processes to avoid falls caused by stepping into slippery wet coating. Installers should read and understand all technical and informational literature on this product, including the MSDS, prior to use of the product.

To the best of our knowledge, all technical data contained herein is true and accurate as of the date of issuance and subject to change without prior notice. User must contact PolyGreen Solutions, LLC. to verify correctness before specifying or ordering. We guarantee our products to conform to the quality control standards established by PolyGreen Solutions, LLC. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of the product. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY PolyGreen Solutions, LLC. EXPRESSED OR IMPLIED; STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.