**PolyGreen Solutions**

*"Polymer Solutions for Sustainability"*

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# Technical Data Sheet for *Silicone Coating 920*

***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 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-920 meets Class "A" Non-Combustible and Class "B" Combustible credentials as tested under UL 790 procedures over spray foam and single ply roofing systems. Meets Miami Dade Approval.

***TYPICAL PHYSICAL PROPERTIES***

| PROPERTY | TEST METHOD | RESULT |
|---|---|---|
| Tensile Strength | ASTM D-2370 | 331 psi @ 73°F |
| Elongation (Initial) | ASTM D-412 | 192% @ 73°F |
| Reflectivity (White) | C-1549 | 87% |
| Permeability | ASTM E-96 Procedure B | 5.9 |
| Tensile, set at 100% Elongation | | Nil. |
| Temp. Stability Range | | -80°F to 350°F (-37°C to 177°C) |
| Water Absorption | ASTM D-471 | .1 weight % after 2 wks @ 75°F (24°C) |
| Weathering/UV Resistance | ASTM G-53 | No Degradation after 5,000 Hrs. |
| Specific Gravity | | 1.28 @ 77°F (25°C) |
| Tack Free Time | | 1 Hour |
| VOC (EPA Method 24) | ASTM D-3960 | <10 Grams/Liter |
| Durometer Hardness | Shore A | 50± 5 points |
| Solids Content by Weight | ASTM D-1644 | 96% ± 2 |
| Solids Content by Volume | ASTM D-2697 | 96% ± 2 |
| Max. Continuous Service Temp. | ASTM D-92 | 185°F |
| Flash Point | ASTM D-93 | >290°F |
| Cure Time | | 2-8 Hrs. Depending Upon Temp. |
| Drying Time | | 1 Hr. @ 77°F |
| Shelf Life | Unopened Containers | 6 Mos. When Stored Between 35°F & 75°F |

# *SC- 920* Application Information

***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$^{o}$ F. (10$^{o}$ 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$^{o}$ fan tip.

***Shipping Information***

| Container Size | Gross Weight | Class |
|---|---|---|
| 5 Gal | 55 Lbs. | 55 |
| 55 Gal. | 575 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.