



SEALGUARD 990 HIGH SOLIDS SILICONE ROOFING ELASTOMER

Overview

- Description**
 SealGuard 990 Silicone is a high solids, single component moisture cure elastomer, designed for use as a cure in place, breathable, waterproofing roof coating system which can be sprayed, rolled or brushed onto the desired substrate. This system resists weathering and oxidation due to the silicone backbone of the polymer. It also withstands high temperatures and UV radiation, reflecting the heat from the substrate reducing cooling costs during high temperatures.
- Usage**
 SealGuard 990 Silicone is primarily used as a waterproofing roof coating system for spray in place polyurethane foam, metal, concrete, wood and most single-ply's. Contact Volatile Free, Inc. for application specifications.
- Color**
 Standard color is white. Contact Volatile Free, Inc. for more information on custom colors

Physical Properties Per ASTM D6694

- Tensile**
 ASTM D-412
 Tensile Strength: 426 psi
 Elongation: 228%
 Final Elongation after 5000 hours: 187%
- Liquid Density & Specific Gravity**
 11.26 lb/gal (1.24 SG)
- Tear Strength**
 ASTM D-624 29 pli
- Flash Point**
 ASTM D-56 187°F Combustible
- Aged Solar Reflectance of White**
 ASTM C-1549
 With out Granules 0.68
 With Granules 0.51
- VOC**
 46 g/l
- Aged Thermal Emittance of White**
 ASTM C 1371
 With out Granules 0.90
 With Granules 0.92
- Coverage**
 See VFI Specification for specific coverage information.
- Permeance (Perms)**
 ASTM E96 Procedure B 8.8
- Storage Stability or Shelf Life**
 6 months from date of manufacture when stored in sealed, unopened containers between 40-75°F.
- Low Temperature Flexibility**
 ASTM D522
 Method B Pass
- Reactivity**
 - **Tack free time:** 2-3 hours @ 75°F, 50% relative humidity.
 - **Cure time:** 3-6 hours @ 75°F, 50% relative humidity.
 - **Recoat time:** 4-48 hours. Do not exceed the recoat time or poor intercoat adhesion may result.
- Solids**
 - **By weight** 96% +/- 1%
 - **By volume** 93% +/- 1%

Weathering & Environmental Performance Approvals

- Underwriters Laboratories
- Energy Star Approved
- ASTM D9994
- Miami Dade
- ASTM E-108
- Florida Building Code
- Title 24 Complaint
- CRRC Rated

Application

■ Equipment

SealGuard 990 Silicone can be applied by brush, roller or sprayed. If sprayed, use single component spray equipment capable of maintaining a minimum constant spray pressure of 5000 psi. 5:1 transfer pump should be used with drums. Any transfer equipment used should have Buna-L jacketed hoses to eliminate moisture contamination to the silicone.

■ Mixing

All drums must be power mixed! Mix all drums with a 1½ horsepower air driven mixer (do not use auger type mixer) for a minimum of 30 minutes depending upon the temperature of the product on the day of application. The shaft should have at least one set of 6" collapsible blades to fit through the bung opening in the drum and should be long enough to reach the bottom of the drum. Pails need to be power mixed with a proper mixer and a 3" minimum mixing blade.

■ Material Application

Mix thoroughly. For cold weather application, keep material above 65°F. Upon opening the drum for use, mix per directions and insert transfer pump, tightly sealed in the opening. A small amount of nitrogen can be added to prevent skinning.

Pails can be directly placed under the sprayer with a nitrogen cap after mixing. Generally the material is applied in two to three coats over most substrates. SealGuard 990 Silicone should not be left longer than 48 hours for subsequent coats.

Apply in alternate direction for each coat to ensure proper coverage and to help eliminate pin holes. Each coat should be a different color. Only if the substrate is flat and smooth can it be sprayed in one coat, up to two gallons per square.

A second application is needed if applying granules.

■ Primers

None required for polyurethane foam if applied within 24 hrs, otherwise use VFI #11. For other substrates, see VFI Primer Chart for appropriate primer. Contact Volatile Free, Inc. for more information.

■ Clean-up Solvent

Use VM&P Naphtha or Mineral Sprits to clean liquid product from tools and equipment. For spray equipment, circulate solvent through lines and spray gun into a separate bucket until all material is removed.

Then put hose end or gun into the clean solvent bucket and circulate until clean. Best to follow up by putting clean solvent in the system and sealing both ends before storing.

■ Limitations

Do not use directly over BUR or Modified bitumen without a primer/sealer. Not for use as a roof for a cold storage application or a cryogenic tank without a vapor barrier.

■ Thinning


Do not thin prior to application

■ Precautions

See Safety Data Sheet for complete safety data. Do not add water to this product. Avoid prolonged breathing of vapors and prolonged or repeated skin contact. Use only with adequate ventilation.

■ Packaging

5 gallon pails
50 gallon drums

	Solar Reflectance	Initial	3 Year
	Thermal Emittance	0.83	0.70
	Rated Product ID	0948-0011	
	Licensed Manufacturer ID	0948	
	Classification	Production Line	
<small>Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on a building performance may vary. Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating Council procedures.</small>			

For more information, contact us today at **800-307-9218**

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