

Roof-Tek®

Poly-Sil 2500 Series HIGH SOLIDS V.O.C. Compliant For Professional Use Only



Miami-Dade County Product Control Approved
NOA No. 13-0114.04 Exp. Date 4/03/14

Florida Approval: FL# 13816

PRODUCT INFORMATION

Product Type: A ready-to use, high solids, single component, moisture cure fluid applied silicone coating.

General Properties: Breathable membrane possessing superior weathering and water resistance characteristics.

Recommended Uses: Provides elemental protection for architectural surfaces such as vertical walls, masonry, concrete, metal, single ply 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.

Ponding Water:

- The Poly-Sil 2500 Membrane is not affected by ponding water, however:
- The National Roofing Contractors Association considers ponding water on any roof undesirable and recommends that all roof systems be designed and built to ensure positive drainage. (See the NRCA Roofing and Waterproofing Manual).

Please consult CFS Technical Department for any specific questions regarding the application of this product.

Flammability Characteristics: Poly-Sil 2500 Series Silicone Coatings carry Class "A" Non-Combustible and Class "B" Combustible credentials as tested under UL 790 procedures over spray foam and single ply roofing systems. Contact CFS or refer to the UL directory for specific information.

Additional Approvals:

- ENERGY STAR®
- CRRC
- Miami-Dade Co.
- Florida Power & Light listed
- Building Envelope Reflective Roofing Approved Technologies
- California Title 24 Compliant.
- Tested and Certified by NSF International

Contact CFS Technical Dept. for details



NSF Protocol P151
Health Effects from Rainwater
Catchment System Components

Standard Colors: White, Light Grey, and Dark Grey. Special colors are available upon request at additional charge. Allow additional 15 days for non-standard colors.

PHYSICAL PROPERTIES:

Material tested complies with all the requirements of ASTM D-6694-01 Standard Specification Liquid-Applied Silicone Coating used in Spray Polyurethane Foam Roofing.

Tensile Strength:	331 PSI at 73°F. 432 PSI @ 0°F.	(ASTM D-2370)
Elongation: (break)	192% at 73°F. 216% @ 0°F.	(ASTM D-2370)
Tear Resistance: (Die C), lb f/in	37.5	(ASTM D-624)
Viscosity: (Brookfield RVF)	Typical 8,000 to 12,000 cps	#5 Spindle 20 rpm @ 77°F
Reflectivity: (White)	.70 Aged 3 yr	(ASTM C-1549)
Emissivity: (White)	.90 Aged 3 yr	(ASTM C-1371)
SRI Value:	110 Initial	
Permeance: US Perms	5.9 ±	(ASTM E-96) Procedure B
Tensile, set at 100% Elongation:	Nil.	
Temperature Stability Range:	-80 °F. to 350°F. (-37C. to 177C)	
Water Absorption:	0.1 weight % after two weeks at 75 F. (24 C.)	(ASTM D-471)
Weathering / UV Resistance:	No degradation 5000 hrs	(ASTM D-6694)
Specific Gravity:	1.30 at 77°F. (25C.)	
Tack Free Time:	1 hour	Temp. & Humidity Dependent (ASTM D-3960) EPA Method 24
VOC:	< 10 Grams/Liter	
Durometer Hardness:	50± 5 points	(ASTM D-2240) Shore A
Solids Content By Weight:	96% ± 2	(ASTM D-1644)
Solids Content By Volume:	96% ± 2	(ASTM D-2697)
Maximum Continuous Service Temperature:	185°F (85°C)	
Flash Point: (COC)	290°F. Minimum 2 hrs	(ASTM D-92) @ 100 Deg F & 90% Humidity
Cure Time:	Maximum 8 hrs	@ 40 Deg F & 20% Humidity (UNOPENED CONTAINERS): 6 Months
Shelf Life:	*** When Stored Between 35°F. and 75° F. ***	

ORDERING INFORMATION: Available in 5-gallon pails (19 liters), and in 55-gallon drums containing 50 gallons (189.3 liters.)

SHIPPING INFORMATION:

Container Size	Class
5 Gal.	55
50 Gal.	55

D.O.T. Classification: Roof Coating, Not Regulated, NFMC #170080

HMIS® Rating:

Health 2, Flammability 1, Reactivity 0, Protection X
0= Minimal 1=Slight 2=Moderate 3=Serious 4=Severe



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APPLICATION PROCEDURES

Poly-Sil 2500 High Solids

Do Not Thin

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. Mix well before use. 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. Hand mixing with a suitable mixing blade is acceptable. When product is in drums, use a 6" minimum diameter-mixing blade. If thinning is necessary, please contact CFS Technical Department.

Containers are packaged with a layer of dry argon 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.

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 hours of application. Poly-Sil 2500 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.

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

SYSTEM OPTIONS: This product can be used as a topcoat over polyurethane elastomeric base coats where improved traffic and impact resistant characteristics are required.

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 24 hours of prior applications to insure full and uniform adhesion. Coating may 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 CFS 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 2-8 hours, dependent on weather conditions (such as temperature and humidity), after which another coat can be applied. #11 ceramic roofing granules 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. 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.

SAFETY PRECAUTIONS: Keep 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.

CLEAN UP: Cleanup of spray equipment containing uncured material may be accomplished by flushing with VM&P Naphtha or mineral spirits. Poly-Sil 2500 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 components 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.