



Poly-Sil™ 2500 High Solids

V.O.C. Compliant
For Professional Use Only

PRODUCT INFORMATION

PRODUCT TYPE: A ready-to-use, solvent-free, 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 a modified bitumen, asphalt or coal tar built-up roofing system without a sealer. Note: Accella™ Roofing Solutions recommends any subsequent coats of silicone be completed within 24 hours to ensure good adhesion of the silicone to the previous coat.

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 Accella™ Roofing Solutions Technical Department for any specific questions regarding the application of this product.

RATINGS / 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, refer to the UL directory for specific information.

STANDARD COLORS: White, Light Grey, Dark Grey, Tan and Terracotta. Some testing and standards are based on a white topcoat. Special colors are available upon request at additional charge. Allow additional 15 days for non-standard colors.

ORDERING INFORMATION

This product is available in 5-gallon pails (19 liters), and in drums containing 50 gallons (189.3 liters).

SHIPPING INFORMATION

Container Size	Class	DOT Classification
50 Gal./5 Gal.	55	Roof Coating, Not Regulated. NFMC #170080

PHYSICAL PROPERTIES

Material tested complies with all of the requirements of **ASTM D 6694-08** and **-07** Standard Specification Liquid-Applied Silicone Coating. Passed: **ASTM C1305** Crack Bridging Ability.

PHYSICAL PROPERTY	TYPICAL VALUE	ASTM TEST METHOD
Tensile Strength:	307 psi at 73°F. ± 20 484 psi at 0 °F. ± 20	(ASTM D-2370)
Elongation: (break)	205% at 73°F. ± 20 306% at 0°F. ± 20	(ASTM D-2370)
Tear Resistance:	(Die C), (lb f/in) 26 @ 73°F	(ASTM D-624)
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	9.3 ±	(ASTM E-96) Procedure B
Tensile, set at 100% Elongation:	Nil.	
Temperature Stability Range:	-80 °F. to 350°F. (-37°C. to 177°C)	
Low Temperature Flexibility (Pass-Fail)	Pass - Tested 180° around " mandrel @ -15°F (-26.1°C)	ASTM D-522) Method B
Water Absorption:	0.1 weight % after 2 weeks at 75 °F. (24 °C)	(ASTM D-471)
Weathering/UV Resistance:	No degradation after 5,000 hours	(ASTM D-6694)
Tack Free Time:	1 Hour	Temp. & Humidity Dependent
VOC:	<50 Grams/Liter	EPA Method 24
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:	>290°F	(ASTM D-92)
Cure Time:	Minimum 2 hrs Maximum 8 hrs	@100°F & 90% Humidity @ 40°F & 20% Humidity
Shelf Life:	(UNOPENED CONTAINERS): 1 Year *** When Stored Between 35°F. and 75°F ***	

HMIS® RATING:

Health 1, Flammability 0, Reactivity 0, Protection X
0= Minimal 1=Slight 2=Moderate 3=Serious 4=Severe
(*) Indicates potential for chronic health effects.

Miami-Dade County Product Control Approved
NOA No. 16-0517.15 Exp. Date 4/03/18
Florida Approval: FL# 13816-R2



Application Procedures

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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 using.** 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 Accella™ Technical Department.

Containers are packaged with a layer of dry nitrogen, 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 dry 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 hour 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.

SPECIAL ORDER COLORS Must be applied in a single coat application.

STANDARD COLORS - WHITE, LT GREY AND DARK GREY
Due to the bonding agent - standard colors - White, Lt Grey and Dark Grey may be used as either a base or a topcoat.

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 Accella™ Polyurethane Systems, LLC ("Accella™") to verify correctness before specifying or ordering. We guarantee our products to conform to the quality control standards established by Accella™. 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 ACCELLA™ EXPRESSED OR IMPLIED; STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

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 Accella™ for recommended dry film thickness.

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 re-coat 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 silicone vapors or spray mists. 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 silicone odors 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 SDS, 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 Rule 66 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.