NanoTech Materials Sub Slope Silicone

High Solids Silicone Elastomeric Coating

NanoTech Materials Sub Slope Silicone is a high-solids, single component liquid applied silicone roof coating. Designed as a protective coating for most roof membranes, it requires no mixing and is moisture cured. In most applications, there is no primer needed, making a simple yet effective product built to last.

OUTSTANDING FEATURES:

- A high-solids, single component, moisture cure fluid applied silicone coating that's ready to use.
- Best in class flexibility. Doubles the elongation of all major competitors and ensures long-term crack resistance even in high-movement situations.
- Shelf life of 18 months.
- Typically, no mixing is required for up to 6 months.
- Excellent sag resistance.
- Superior weathering and excellent water resistance in a breathable membrane.
- Exceptional adhesion to unprimed, weathered, or painted metal, TPO PVC, and EPDM.

APPLICATION:

This product may be brushed, rolled, or sprayed on a clean, dry surface. For details, see Equipment Recommendations at the end of this sheet. Polyurethane foam should be coated within 24 hours of application.

Coatings may be applied in 2 or 3 separate applications of contrasting colors, each applied at right angles to the previous coat. The coating must be evenly applied and pinhole-free. Before applying an additional coat, the previous coat must be completely dry and cured. If any contamination is present on the cured surface, it must be washed and completely dry before the application of subsequent coats.

Yield (1 gallon to 100 square feet)	14 dry mils
Dry Time (100°F)	2 hours @ 90% Humidity
Dry Time (40°F)	8 hours @ 20% Humidity
Recoat Window	>8 hours
Complete Cure	48 hours

RECOMMENDED USES:

NanoTech Materials Sub Slope Silicone is designed as a protective coating for most roof membranes. Un-matched adhesion to unprimed TPO PVC and EPDM along with excellent performance over weathered metal, primed Cap sheet, and Mod Bit membranes.

ENVIRONMENTAL CONDITIONS:

The product must not be applied when the ambient temperature is below 0° F. Application is not recommended if rain or dew is likely to occur before the product dries.

SURFACE PREPARATION:

The surface to be coated should be dry, free of dust, dirt, oil, loose granules, peeling coating, or other foreign matter. It may be necessary to power wash and/or prime to enhance adhesion.

COLORS:

White and Light Gray.
Custom Colors are available for an additional charge. Allow additional 15 days for custom colors.

PACKAGING:

5-gallon pail and 55-gallon drum

SAFE PRACTICES:

This product is designed for professional installation. Before working with this product, you must read and become familiar with the available information on its risks, proper use, and handling. Information sources include but are not limited to SDS and product labels. More resources are available at nanotechmaterials.com or by contacting NanoTech Materials directly.

CLEAN UP:

Clean spray equipment containing uncured material by flushing with VM&P, Naphtha, or mineral spirits. NanoTech Materials Sub Slope Silicone cures by reacting with moisture. Do not leave in spray guns, pump equipment, and hoses for prolonged periods unless the equipment contains moisture lock hoses, fittings, and seals. Without these, the material will cure on hose walls and at unsealed connections possibly causing an increase in operating pressure and material flow restriction.

LIMITATIONS:

The surface must be clean and dry. Do not apply over wet substrates or when inclement weather is imminent. In addition, this product is not recommended for use without a vapor barrier in cryogenic tanks or cold storage roofing applications or directly over modified Bitumen, asphalt, or coal tar built-up roofing systems without a sealer. This product carries Class “A” Non- Combustible and Class “B” Combustible credentials as tested under UL 790 procedures over spray foam and single-ply roofing systems.

Contact NanoTech Materials directly for more information.

EQUIPMENT:

Minimum requirements:

Brush

- Synthetic filament

Roller

- 1 1/4" nap roller

Spray

- Minimum 6500 PSI high-pressure airless paint pump
- 3 gallons or more per minute (continuous) output
- 5:1 transfer pump to prevent cavitation
- Hose rated to 2x maximum pump pressure
- Hose should be BUNA-N jacketed to prevent moisture contamination
- Hose lengths: (Largest diameter at pump)
- 3/4 minimum
- Spray gun: High-pressure 7000 PSI
- Spray Tip:
  - Reversible self-cleaning type
  - Orifice size of .030
  - Fan angle of 40° to 50°
- Always use components rated for pump pressures.
- Do not use a hose that has been used for acrylics. The liner will absorb moisture and start the silicone cure process.

Property	Test Method	Result
Tensile Strength	ASTM D-2370	288 PSI @ 73°F ± 20
Elongation (break)	ASTM D-2370	468% @ 73°F ± 50
Tear Resistance (Die C) lb f/in	ASTM D-624	30 ± 3
SRI	CRRC	110
Reflectivity (White)	ASTM C-1549	.87
Emissivity (White)	ASTM C-1371	6.7
Permeance US Perms	ASTM E-96 (Procedure B)	-80°F to 350°F (-37°C to 177°C)
Temperature Stability Range		No degradation 5000 hours
Weathering/UV Resistance	ASTM D-6694	1.30 @ 77°F (25°C)
Specific Gravity		20-30 min.
VOC	Tem. & Humidity Dependent	<50 grams/liter
Durometer Hardness	ASTM D-3960 EPA Method 24	36
Solids Content by Weights	ASTM D-2240 Shore A	91%
Solids Content by Volume	ASTM D-2697	90%
Max Continuous Service Temperature		185°F (85°C)
Shelf Life - Unopened Containers	6 Months	Stored @ 35°F or 75°F