



# THERMO-SIL PRO™ 9600 TECHNICAL DATA SHEET

#### **High Solids Silicone Roof Coating**

# **Product Use and Design**

Thermo-Sil Pro™ 9600 Series High Solids Silicone Roof Coating is a single-component, moisture curing silicone rubber roof coating system designed for use on existing smooth surface BUR, granulated cap sheet, well-adhered acrylic coating, concrete, metal, sprayed-inplace polyurethane foam and various single-ply membrane roofing. Thermo-Sil Pro™ 9600 Series High Solids Silicone Roof Coating is designed to withstand the damp heat and ultra-violet rays of humid environments.

Thermo-Sil Pro™ 9600 Series High Solids Silicone Roof Coating is used as a protective coating over polyurethane foam.

Product Characteristics			
Standard Colors:	TS Pro 9600 – WHITE   TS Pro 9600 – TAN   TS Pro 9600 – LIGHT GRAY		
Cool Roof Rating Council (CRRC) Product ID:	( White) - 0770-0009		
Radiative Properties: (TS White)	Solar Reflectance - Initial: Thermal Emmitance - Initial:	0.88 0.90	
Solar Reflective Index:	SRI - Initial: SRI - Aged:	111 100	
Cure Time:	8-72 hours		
Tack Free Time:	Less than 8 hours		
Recoat Window:	2-4 hours		

#### Application Equipment

Due to the high viscosity of the material, a high-pressure airless sprayer 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 rate. 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. Thinning of this material is not recommended. DO NOT USE hose that has been used for Acrylic or other waterborne coatings, the liner absorbns moisture and initiates silicone cure process.

Contact Huntsman Building Solutions Technical Service personnel for specific recommendations, pricing and availability of spray and auxiliary equipment.

# Mixing Procedure

Thermo-Sil Pro<sup>™</sup> Pro 9600 High Solids Silicone Roof Coating should never be thinned with solvent or other solutions. If settling of packaged container occurs, stir or shake material prior to use. Product may separate after shipping and storage, though it may still look mixed. Mix well before using. It is 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. Containers are packaged with a layer of dry nitrogen, to keep latent moisture from prematurely starting the curing process. Once opened, the product has a pot life of 2-6 hours, depending on relative humidity conditions.

Physical Properties			
Properties	Test Method/Requirements	Value	
Tensile Strength:	ASTM D 2370	>240 psi @ 73°F	
Elongation:	ASTM D 2370	>237% @ 73°F	
Tear Resistance:	ASTM D 624	>23 lbf/in @ 73oF	
Permeability:	ASTM E-96	3.4 (Method B)	
Solids by Volume:	ASTM D 2697	97%	
Weight per Gallon:	ASTM D1475	10.3 (±.2)	
Theoretical Coverage:	22 dry mils	1.5 gallon	
Volatile Organic Compounds:		< 50 grams per liter	
Flash Point:		>100°F	

#### **Processing Parameters**

Thermo-Sil Pro<sup>™</sup> 9600 High Solids Silicone Roof Coating should be stored in sealed containers in a dry area, out of direct sunlight and high heat. Do not open containers until ready for use and store containers between 35°F and 75°F to maintain full shelf life. Thermo-Sil Pro<sup>™</sup> 9600 High Solids Silicone Roof Coating generally can be stored in unheated warehouses during the cooler months without the risk of freezing.

# **Surface Preparation & Priming**

Apply Thermo-Sil Pro™ 9600 High Solids Silicone Roof Coating only to clean, dry, sound surfaces, free of loose particles or other foreign matter. Apply only to roofs that have adequate positive drainage (i.e. a minimum slope of 1/8 inch per foot).

### **Product Application**

Thermo-Sil Pro™ 9600 High Solids Silicone Roof Coating is intended for use as a direct-bond, single pass silicone roof coating. Apply at a minimum rate of 1.5 gallons per 100 ft² for a minimum Dry Film Thickness (DFT) of 22 mils. The roof and substrate should be prepped per the manufacturers specification prior to coating. The coating will be dry-to-touch in 2-8 hours and should be completely cured and a walkable surface in no more than 72 hours depending on weather conditions (such as temperature and humidity). #11 Ceramic Roofing Granules may be installed in the topcoat to improve aesthetics, traffic resistance and impact resistance. No more than 2.5 gallons per 100 ft² should be applied in a single-pass or application.

#### **Limitations and Precautions:**

Do not apply over wet substrates or when inclement weather is imminent. Total cure time requires complete evaporation of carrier. Not recommended for use in permanent standing water for periods longer than 72 hours. Cool temperatures and high humidity retard cure. Do not apply if climatic conditions prevent complete cure before rain, dew or freezing temperatures. For applications over bituminous or asphaltic substrates, the use of Thermo-Sil Pro<sup>TM</sup> 9600 Bleed Blocker is recommended to prevent asphalt bleed-through or staining. Thermo-Sil Pro<sup>TM</sup> 9600 High Solids Silicone Roof Coating can be applied directly over most existing, aged single ply membranes including PVC, TPO, EPDM, and Hypalon pending positive results from an in-field adhesion test.

# **Recoating Procedures**

This product may be used to re-coat existing silicone roof coatings and existing acrylic roof coatings. Refer to manufacturers specification for application procedures, roof preparation, installation guidelines.

# **Ponding Water**

Thermo-Sil Pro™ 9600 High Solids Silicone Roof Coating can be applied over properly prepared surfaces that exhibit ponded water, however, The National Roofing Contractors Association (NRCA) considers ponding water an undesirable non-standard roofing practice and recommends that all roof systems be designed and built to ensure positive drainage. (See the NRCA Roofing and Waterproofing Manual). Please contact Huntsman Building Solutions' Technical Department for any specific questions regarding the application of this product.

Thermo-Sil Pro™ 9600 High Solids Silicone Roof Coating is not a vapor barrier coating and not recommended for use over most cold storage installations. Where a vapor barrier is required, contact Huntsman Building Solutions Technical Service Personnel for proper selection and installation procedures.

#### Clean Up:

Uncured silicone coating can be cleaned or equipment can be flushed with VM&P Naptha or Mineral Spirits. Thermo-Sil Pro™ 9600 High Solids Silicone Roof Coating cures by reacting with moisture and should not be left in spray guns, pump equipment and/or hoses for prolonged periods of time unless equipment contains moisture lock hoses, fittings and seals.

# Maintenance:

The life of the roof may be extended by regularly scheduled maintenance. A roof should typically be inspected at least twice a year. The roof immediately needs to be inspected following severe weather and extraordinary maintenance on roof-mounted equipment.

**SHELF LIFE:** 18 months from manufactured date when stored properly.

#### Packaging

U.S. MEASURES: 5.0 Gallon Pails, 55 Gallon Drums WEIGHT PER U.S. GALLON: 11.30 lbs.

# **General Heath & Safety Precautions**

This product is intended for use by trained professional personnel. Safety Data Sheets are available and any individual who may come in contact with these products should read and understand the S.D.S. In case of emergency contact CARECHEM EMERGENCY NUMBER at (866) 928-0789.

**WARNING:** Avoid eye contact with the liquid or spray mist. Applicators should wear protective clothing, gloves and use protective equipment on face, hands and other exposed areas.

**EYE PROTECTION:** Safety glasses, goggles, or a face shield are recommended.

SKIN PROTECTION: Chemical resistant gloves are recommended. Cover as much of the exposed skin area as possible with appropriate clothing.

**RESPIRATORY PROTECTION is MANDATORY!** Respiratory protective equipment, impervious foot wear and protective clothing are required at all times during spray application. Contact Huntsman Building Solutions for a copy of the Respiratory Protection Program developed by OSHA.

INGESTION: Do not take internally. Consider the application and environmental concentrations in deciding if additional protective measures are necessary.

# **DISCLAIMERS**

The data presented herein is not intended for use by non-professional applicators, or those persons who do not purchase or utilize this product in the normal course of their business. The potential user must perform any pertinent tests in order to determine the product's performance and suitability in the intended application, since final determination of fitness of the product for any particular use is the responsibility of the buyer. All guarantees and warranties as to products supplied by Huntsman Building Solutions, shall have only those guarantees and warranties expressed in writing by the manufacturer. The buyer's sole remedy as to any material claims will be against the applicator of the product. The aforementioned data on this product is to be used as a guide and is subject to change without notice. The information herein is believed to be reliable, but unknown risks may be present. NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING PATENT WARRANTIES OR WARRANTIES OF MERCHANTABILITY OR FITNESS FOR USE, ARE MADE BY LAPOLLA INDUSTRIES, INC. WITH RESPECT TO OUR PRODUCTS OR INFORMATION SET FORTH HEREIN.

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