

#923 ETERNA-SIL PREMIUM SILICONE ROOF COATING

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

Tropical Roofing Products' #923 Eterna-Sil Premium Silicone Roof Coating is a professional-grade, solvent- based, liquidapplied, single component, moisture-cure silicone coating
formulated to deliver direct-bond adhesion as a restoration
and maintenance coating over most common roof substrates
and membranes. **#923 Eterna-Sil Silicone Roof Coating** forms
a durable, vapor permeable, watertight and weatherproof
barrier that is resistant to degradation from natural
weathering. The coating has excellent UV resistance, dries to a
bright white "cool roof" finish which keeps roof surfaces cooler
preventing thermal shock and extending the life of the roof.

SPECIFICATIONS, APPROVALS + COMPLIANCE

#923 is independently tested and complies and/or exceeds all the requirements of ASTM D 6694 Standard Specification Liquid-Applied Silicone Coating used in Spray Polyurethane Foam Roofing Systems. Approvals and certifications are currently in process and pending for Energy Star, Miami-Dade, UL, FM, and Florida Building Code HVHZ compliance CRRC initial and accelerated values are published and are pending 3-year aged values.

PRODUCT LIMITATIONS

For applications over bituminous or asphaltic substrates, the use of **Tropical's #996 Bleed Blocker** is recommended to prevent asphalt bleed-through or staining. **#923** 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. Always refer to the manufacturers **(Tropical Roofing Products)** specification for application limitations, procedures, and guidelines. Not recommended for continuous immersion service, for use in cryogenic tank, or cold storage roofing applications without a vapor barrier

PHYSICAL PROPERTIES

ETERNA-SIL PREMIUM SILICONE ROOF COATING		
Tensile Strength	215 +/- 10 psi @ 73F	
Elongation	420% +/- 10% @ 73F	
Tear Resistance	29 +/- 3 lbf/in @ 73F	
V.O.C	<250 g/L	
Inital Solar Reflectivity	.81	
Accelarated Aged Solar Reflectivity	0.75	
Inital Emissivity	.89	
Inital SRI Value	102	

Permeance (Method B)	6.1 perms
Solids by Weight	79% +/- 5%
Solids by Volume	70% +/- 5%
Tack-Free Time	2-6 hours (RH dependent)
Full Cure Time	72 hours (RH dependent)
Shelf Life**	18 months (un-opened containers) **when stored between 35°-75°F

PONDING WATER

#923 silicone 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 Tropical Roofing Products Technical Department for any specific questions regarding the application of this product.

FIRE RESISTANCE CHARACTERISTICS

#923 silicone coating is approved for Class "A" Non-Combustible credentials as tested under UL 790 Spread of Flame procedures over most common roofing substrates and membranes. Contact **Tropical Roofing Products** or refer to the UL directory for specific information.

PREPARATION

Prior to coating, all surfaces must be clean and dry. It may be necessary to power wash and/or prime to enhance adhesion and or limit asphalt bleed through. Refer to the manufacturers specification for all preparation and guidelines.

MIXING PROCEDURES

Do not thin product with solvent or other solutions.

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. 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.









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APPLICATION EQUIPMENT

This product may be sprayed, squeegeed, brushed, or rolled. Due to the viscosity of the material, a highpressure airless paint pump capable of producing a minimum of 4000 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.

APPLICATION

#923 is intended for use as a direct-bond, single pass silicone roof coating. Apply at a minimum rate of 1.6 gallons per 100 ft2 for a minimum Dry Film Thickness (DFT) of 18 mils. The roof and substrate should be prepped per the manufacturers specification prior to coating. Consult **Tropical Roofing Products** technical team for questions regarding other dry film thickness. 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). #807 Ceramic Roofing Granules may be installed in the topcoat to improve aesthetics, traffic resistance and impact resistance. No more than 3.0 gallons per 100 ft² should be applied in a single-pass or application.

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.

COVERAGE

Apply at a minimum rate of 1.6 gallons per 100 ft² for a minimum Dry Film Thickness (DFT) of 18 mils. Application rates will vary by surface, porosity, and job conditions. Please consult **Tropical Roofing Products** for total dry film thickness requirements.

PRECAUTIONS

#923 should not be applied at ambient temperatures lower than 40° F. Be sure that all surfaces are not wet or damp and that rain is not forecasted during application window or for at least 1 hour after application has ended.

CLEANUP

Cleanup of spray equipment containing uncured material may be accomplished by flushing with VM&P Naphtha or Rule 66 Mineral Spirits. **Tropical #923** cures by reacting with moisture and should not be left in spray guns, pump equipment and/or 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.

SHIPPING INFORMATION

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

CONTAINER SIZE	CLASS
5 Gal.	55
50 Gal.	5

ORDERING INFORMATION

Available in 1 and 5-gallon pails, 50-gallon drums, and 250-gallon totes.

KEEP OUT OF REACH OF CHILDREN. Close container after each use. DO NOT TAKE INTERNALLY! If swallowed, do not induce vomiting. CALL PHYSICIAN IMMEDIATELY!