



Product Data Sheet

100% SILICONE ROOF COATING

PRODUCT DESCRIPTION

Rev: April 2023

100% Silicone Roof Coating is a premium grade high solid, moisture cure, liquid applied silicone coating which cures to form a seamless membrane when applied over the entire roof area. It also keeps the surface cool, providing protection from ultraviolet sun and other weather exposures.

BASIC USES

Designed for use on existing smooth surface BUR, granulated cap sheets, well adhered acrylic coatings, concrete, metal, sprayed in place polyurethane foam (SPF) and various single-ply roofing membranes. Primer may be required. Contact Mule-Hide Technical Services for clarification of unusual surfaces or project conditions.



FEATURES AND BENEFITS

- Excellent resistance to weathering including UV radiation, extreme temperatures, as well as rain, ice, and snow.
- Extends the useful life of the roof.
- 100% Silicone Roof Coating can reduce energy costs by decreasing roof surface temperature.
- Fungal and algal resistant – even in high temperatures.
- With high solids content and absence of hydrocarbon solvents, 100% Silicone Roof Coating can be applied in excess of 40 wet mils in a single coat without blistering, while maintaining maximum adhesion.

TYPICAL PHYSICAL PROPERTIES

Physical Property*	Test Method	Value
Accelerated Weathering @ 5000 hr (pass/fail)	ASTM D6694	pass
Permeance (perms)	ASTM E96 (procedure B)	10.7
Elongation (%)	ASTM D412	237
Tensile Strength (psi)	ASTM D412	247
Hardness (Shore A)	ASTM D2240	87
Solids Volume (%)	ASTM D2369	92 ± 3
Temperature Stability Range (°F)		-35 to 212
Tack-free time (hrs, subject to temp/humidity)		1– 2
VOC (gm/l)	Calculated	< 50
Flash Point (°F)	PMCC	141
Initial Solar Reflectivity	ASTM C1549	89
Initial Thermal Emissivity	ASTM C1371	90
SRI Value	Calculated	113
Colors	White, Light Grey, Dark Grey, and Tan	
*Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.		

PACKAGING

Container sizes: 5 gallon pails, 55 gallon drums

APPLICATION INSTRUCTIONS

The chemistry of silicone, which Mule-Hide Silicone roof coatings are manufactured with, is not adversely affected by ponding water or prolonged rain exposure when applied at recommended minimum specified thicknesses. Please be advised that good roofing practices, Building Codes and The National Roofing Contractors Association (NRCA) consider ponding water on any roof undesirable and recommend that all roof systems be designed and

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built to ensure positive drainage (See the NRCA Roofing and Waterproofing Manual and any applicable Code Ordinances).

Surface Preparation

- Surfaces to be coated with 100% Silicone Roof Coating must be properly prepared. All surfaces must be clean dry and free of loose particles.
- All aluminum coatings must be completely removed prior to coating.
- Repair metal and non-metal flashings, edges, drains, valleys, and through-roof penetrations.
- Do not apply to wet or visibly damp surfaces, or surfaces previously covered with coal tar-based products or metal having Kynar® finishes.
- Any substrate where there is a question related to the ability of a Mule-Hide coating to properly adhere should have an adhesion test performed following the procedures in Mule-Hide Technical Bulletin 07-1803.
- This coating is a one-part, ready-to-use material that can be applied easily to a dry, clean, frost-free surface and cures at normal temperature and humidity levels in 1 to 4 hours by reacting with moisture in the air. For applications with lower than normal temperatures and humidity levels, expect the cure time to be longer.

Mixing

1. Mechanically mix 100% Silicone Roof Coating prior to use.
2. Avoid entraining air while mixing.
3. Do not thin.

Application

- Stir well prior to application.
- 100% Silicone Roof Coating is recommended to be applied with high pressure sprayer for best appearance and coverage. It may also be applied by roller or brush applications.
- 100% Silicone Roof Coating can be applied in excess of 40 mils in a single coat without blistering, while maintaining maximum adhesion.

Application instructions are basic guidelines only. Please read and understand the complete Mule-Hide specifications for this product prior to use.

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 3500 PSI should be used. The pump should have a minimum of 3 gallons per minute output. 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 as the liner absorbs moisture and initiates the silicone cure process.

PRECAUTIONS

- Avoid prolonged contact with skin or fumes. If irritation occurs seek medical attention.
- Use of proper personal protection equipment such as gloves or respirators should be used as appropriate
- Keep out of reach of children
- For professional use only
- Read SDS prior to use.
- **California Proposition 65 Warning: This product may contain chemicals know to the State of California to cause cancer, birth defects and/or reproductive harm**

Storage and Cleaning

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- Shelf life is 24 months if stored in original unopened containers.
- All containers should be sealed when not in use.
- Keep from freezing.
- Store between 40°F and 80°F
- Observe normal safeguards for storing and handling of this product prior to and during application.
- Uncured silicone coating can be cleaned up and equipment can be flushed with VM&P Naphtha or Mineral Spirits.

For Professional Use Only - Keep out of the reach of children.

MANUFACTURING FACILITIES

- New Albany, IN 47150

RADIATIVE PROPERTIES

DESCRIPTION	INITIAL VALUE	AGED VALUE
CRRC Rated Product ID#: 0670-0022		
CRRC solar reflectance (smooth)	0.89	0.73
CRRC initial thermal emittance (smooth)	0.89	0.88
Solar Reflectance Index (SRI)	112	89
<small>*The ratings above are subject to CRRC rating program conditions, requirements, and limitations. Visit Coolroofs.org for important information and disclaimers about CRRC rating requirements and limitations. For purposes of CRRC rating, a rough surface is a surface that is equally coarse to coarser than a new (i.e. unweathered) #11 granulated modified bitumen sheet. The Cool Roof Rating Council (CRRC) does not specify minimums for reflectance or emittance but they do require specific protocols for testing and reporting. Cleaning of the aged roof surface is not permitted for determination of radiative properties after 3 years.</small>		

PROTECTION & SAFETY

Mule-Hide maintains Safety Data Sheets on all of its non-exempt products. Safety Data Sheets contain health and safety information for your development of appropriate product handling procedures to protect your employees and customers. Mule-Hide's Safety Data Sheets should be read and understood by all supervisory personnel and employees before using Mule-Hide products in your facilities.

ADDITIONAL INFORMATION

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