



ROOFARMOR **SILICONE**

Elastomeric Silicone

DESCRIPTION

ROOF ARMOR - SILICONE is a single-component silicone elastomer specifically designed to protect construction surfaces from the effects of weather and moisture. The outstanding features of ROOF ARMOR - SILICONE are its high solids content, rapid cure and superior physical properties. ROOF ARMOR - SILICONE is designed as a two-coat system consisting of a basecoat with a contrasting-colored topcoat.

USES

ROOF ARMOR - SILICONE is designed to provide a durable elastomeric protective coating for sprayed polyurethane foam insulation. UL-TRA-GUARD 5500 can be used by itself as the complete protective coating membrane. With the addition of ceramic roofing granules embedded into the coating surface, superior abrasion resistance is achieved.

BUILDING AND FIRE CODES

ROOF ARMOR - SILICONE is listed and classified by Underwriters Laboratories Inc. UL 790 Class A as an integral component of numerous roof deck assemblies, File #14330.

ROOF ARMOR - SILICONE is approved by the California State Fire Marshall

ADVANTAGES

ROOF ARMOR - SILICONE's dry time may be shortened with the addition of an accelerator package. ROOF ARMOR - SILICONE exhibits excellent adhesion to sprayed-in-place polyurethane foam as well as other construction surfaces. ROOF ARMOR - SILICONE retains its flexibility and membrane integrity from -80° F to +250° F.

WEATHERING AND RESISTANCE PROPERTIES

ROOF ARMOR - SILICONE has excellent appearance and good flexibility with no checking, cracking or significant discoloration after 8,000 hours Accelerated Weathering exposure in an Atlas carbon arc weatherometer according to ASTM D-822. ROOF ARMOR - SILICONE has excellent heat resistance to 250° F, good salt, acid and solvent resistance, and fair alkali resistance.


ADHESION

ROOF ARMOR - SILICONE adheres well to most properly prepared construction surfaces, including spray-applied polyurethane or isocyanurate foam insulation. ROOF ARMOR - SILICONE can be re-coated when cured enough to allow light foot traffic or as much as 7 to 10 days between coats.

APPLICATION

ROOF ARMOR - SILICONE is designed to be applied through high pressure airless spray equipment. ROOF ARMOR - SILICONE's theoretical dry film thickness is 10.5 mils when applied at 1 gal. per 100 square feet. The minimum recommended thickness when used as a protective membrane over polyurethane foam is 24 dry mils. ROOF ARMOR - SILICONE should only be applied by professional applicators.

Consult **Polysource Industries Inc.** for specific application requirements and end uses.

	Solar Reflectance	Initial .87	Weathered .63
	Thermal Emittance	.89	.90
	Rated Product ID	0684-0008	
	Licensed Manufacturer ID	0684	
	Classification	Silicone Coating	
<small> Cool Roof Rating Council ratings are determined for a fixed set of conditions, and may not be appropriate for determining seasonal energy performance. The actual effect of solar reflectance and thermal emittance on building performance may vary. Manufacturer of product stipulates that these ratings were determined in accordance with the applicable Cool Roof Rating procedures. </small>			

Nominal Properties

PHYSICAL PROPERTY	TEST METHOD	VALUE
*Dry Time	75 F, 50% RH	>3
*Dry Time w/Accelerator Pkg.	75 F, 50% RH	<2
Weathering QUV 10,000 hours	ASTM D-822	No degradation
Elongation	ASTM D-412	225%(+/-15)
Tensile Strength (Die C)	ASTM D-412	500 psi(+/-25)
Permanent Set at Break	ASTM D-412	1.0%
Permanent Change - Heat Aged	ASTM D-412	0%
Tension Set @ 100%	ASTM D-412	0%
Water Absorption	ASTM D-570	0.2
Durometer hardness: Shore A	ASTM D-2240	45-55
Permeability (U.S. perms)	ASTM E-96	2.0
Tear Strength	ASTM D-624	45 lbs/in

LIQUID PROPERTY	TEST METHOD	VALUE
Solids by Volume	ASTM D-2697	66%
Solids by Weight	ASTM D-2697	78%
Flash Point	ASTM D-56	115 F

This information is intended only as a guide for design purposes. The values shown are the average values obtained from sprayed laboratory samples. The test methods were performed per the ASTM Book of Standards. Higher or lower temperature & humidity conditions will effect dry time.

The information contained herein is for purposes of identifying the product and does not constitute a warranty that the product will conform to that description. Product specifications and performance will vary depending on application methodologies, raw materials and other factors.

Safety, Health & Toxicity Data

A Material Safety Data Sheet has been prepared on this coating. All personnel who will come in contact with the product should read and understand this MSDS.

PROTECTIVE EQUIPMENT

Since the coatings are atomized into a very fine particle distribution during spray application, it is essential that maximum effort is made to protect the spray mechanic and others near the workplace from undue exposure.

VAPOR INHALATION

The best form of protection against organic solvents or potentially sensitizing vapors in the workplace is a fresh air supply. Numerous manufacturers, including the 3M Company and MSA, make full face fresh air masks. For maximum protection, we recommend use of NIOSH/MSHA approved self-contained breathing apparatus with a full-face piece operated in a positive pressure mode. In well-ventilated application conditions, the use of Type C organic vapor cartridge respirators is acceptable.

SKIN CONTACT

To prevent excessive skin contact with the sprayed product, we recommend use of fabric coveralls and neoprene or other resistant gloves.

EYECONTACT

Wear a full-face mask or OSHA-approved protective goggles.

FLAMMABILITY

Flash point is 115° F. Avoid open flame or spark sources. Avoid excessive heat. Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors or other ignition sources at locations distant from the material-handling point. Never use a welding or cutting torch on or near the drum. In case of fire, use CO₂, steam, dry chemicals or water fog.

SHELF LIFE

ROOF ARMOR - SILICONE has a minimum shelf life of 6 months from the date of manufacture when stored in original unopened containers at temperature ranges between 32°F and 100°F.

The information herein is believed to be reliable, but unknown risks may be present. Polysource Industries Inc. warrants only that the material shall be of merchantable quality; this warranty is in lieu of all other written or unwritten, expressed or implied warranties; and General Coatings Manufacturing Corp. expressly disclaims any warranty for a particular purpose or freedom from patent infringement. Accordingly, Buyer assumes all risks whatsoever as to the use of these materials and Buyer's exclusive remedy as to any breach of warranty or negligence claim shall be limited to the purchase price of the materials. Failure to strictly adhere to recommended procedures shall relieve Polysource Industries Inc. of all liability with respect to the materials or the use thereof.

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PROTECTION OF THE WORKPLACE

Overspray of the coatings can carry considerable distances and attention should be given to the following:

1. Post warning signs a minimum of 100 feet from the work area.
2. Cover all intake vents near the work area.
3. Minimize or exclude all personnel not directly involved with the spray application.
4. No welding, smoking or open flames.
5. Have CO₂ or other dry chemical fire extinguisher available at the jobsite.
6. Provide adequate ventilation.

FIRST AID CONSIDERATION

Vapor inhalation problems are characterized by coughing, shortening of breath and tightness in the chest. Anyone exhibiting these types of symptoms should be immediately removed from the workplace and administered oxygen or fresh air. If the condition is prolonged or extreme, **SUMMON EMERGENCY TRAINED MEDICAL ATTENTION IMMEDIATELY.**

Effects of overexposure to vapor are characterized by nasal and respiratory irritation, dizziness, nausea, headache, fatigue, possible unconsciousness or even asphyxiation.

If ingested and the victim is conscious, give large amounts of water or milk to drink. Obtain medical attention immediately. Skin contact with liquid components can result in a rash or other irritation. Wash the affected skin area with water. Wipe residual liquid from the skin with a clean cloth, then wipe the affected area with 30% solution of rubbing alcohol. Follow the alcohol wipe with repeated washings with soap and water. If a rash or other irritation develops, see a physician.

Eye Contact with liquid or sprayed components can result in corneal burns or abrasions. Upon exposure, eyes should be flushed with water for an extensive period. **SUMMON EMERGENCY TRAINED MEDICAL ATTENTION IMMEDIATELY.**