

# **IB** Silicone Coating

Pro Grade Silicone Coatin

Technical Data Sheet



IB SILICONE COATING is a high performance, high solids, single component, moisture cure fluid applied silicone elastomeric coating that is designed to help reduce surface temperatures thereby minimizing thermal expansion and contraction while providing exceptional resistance to UV degradation and long lasting and preventative solutions for the renewal and maintenance of many roof types. Meets or exceeds ASTM D 6694

## **PACKAGING**

5 gallon Pail & 50 Gallon Drum

## **FEATURES AND BENEFITS**

- Ponding water resistant
- 90% solids by volume
- Excellent adhesion to a variety of substrates
- Excellent sag resistance
- No mixing required (up to 6 months)
- Unique formulation allows breathable film while providing a watertight membrane and permitting trapped moisture to escape
- Low VOC, less than 50 grams/liter
- Available in gray or white

## **PRODUCT USE**

**IB Silicone Coating** is designed to provide a protective weathering coating over metal panel roofs, smooth, and granule asphaltic roofs, concrete, and aged EPDM and aged thermoplastic single-ply membranes.

## ORDERING INFORMATION

## **IB Silicone Coating**

Item Code	Description	Size	Class
9-SCG	IB Silicone Coating Gray	5-gal	55
9-SCW	IB Silicone Coating White	5-gal	55
9-SCT	IB Silicone Coating Tan	5-gal	55
9-SCG55	IB Silicone Coating Gray	50-gal	55
9-SCW55	B Silicone Coating White		55
9-SCT55	IB Silicone Coating Tan	50-gal	55

## **COVERAGE RATE (APPROXIMATE)**

Approximate coverage rate is 1.0 to 3.5 gallons per 100 square feet (16-56 wet mils) per pass depending on substrate type and roughness.

Yield (1 gal/100 sq. ft.) = 16 wet mils/14 dry mils.

See recommendations for specific applications. Yields will vary depending upon system selected and the smoothness and absorbency of substrate.

Solar Reflectance / Thermal Emittance / SRI Values								
Color		eflectance 549)	Thermal Emittance (C1371)		SRI Value (E1980)			
White	Initial	3-Year Aged	Initial	3-Year Aged	Initial	3-Year Aged		
	0.87	0.76	0.89	0.89	110	94		

Physical Properties						
Property	Test Method	Typical Value				
% Solids by Volume	D2697	90% ± 2%				
% Solids by Weight	D1644	91% ± 2%				
		468% (initial)				
Elongation	D2370	300% (aged)				
Tensile Strength	D2370	205 psi (initial)				
Terisile Strength	D2370	300 psi (aged)				
Tear Resistance: Die C lb./ in	D624	27				
Weathering/UV Resistance	D6694	Pass 5000 hours				
Permeance	E96 Procedure B	Perms 6.7				
Weight per Gallon	-	10.9 lbs./gal				
VOC Content	EPA M24	<50 g/L				
Tack Free Time	-	20-30 min (Temp & Humidity Dependent)				
Hardness Shore A	D2240	36				
Service Temperature	-	185°F (85°C)				
Dry Time @ 100°F (37.8°C)	-	2-3 hours @ 90% humidity;				
Dry Time @ 40°F (4.4°C)	-	8 hours @ 20% humidity;				
Recoat Window	-	9-12 hours to recoat				
Cure Time		48 hours				
Shelf Life: (unopened container stored at temperatures between 35°F and 75°F.		6 months from date of manufacture.				

## **TEMPERATURE PRECAUTIONS**

Do not apply this product below 50°F (10°C) or in weather conditions where the temperature will drop below 40°F (4.4°C) during the curing cycle. Upper temperature restriction (both air and substrate) for application of IB Coating products is 120°F (49°C). If the substrate temperature exceeds 120°F (49°C), IB Coating products should be applied during cooler periods of the day. No coating should be applied unless surface temperature is 40°F minimum and 120°F maximum.

## **RELATIVE HUMIDITY PRECAUTIONS**

Although silicone products are moisture curing, for best results do not apply this product when it is raining, if the threat of rain exists, or dew is likely to occur before product dries. Do not apply when the dew point is less than 5°F below the ambient temperature. Do not apply in conditions when the relative humidity exceeds 90%.



#### STORAGE

Always store in a cool and dry location. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. For best results, keep product stored above 50°F (10°C) and below 90°F (32°C). Do not store in direct sunlight or in temperatures. Keep from freezing. Allow material to set at room temperature for 24 hours prior to use

## **APPLICATION GUIDELINES**

## **Application Equipment**

#### Airless Sprayer:

- Output: Minimum 3.0 gal per minute
- Pressure: Minimum 6,500 psi high-pressure airless pump
- Transfer Pump: 5:1 transfer pump to prevent cavitation
- Spray Gun: Contractor rated for pressure (7000 psi), equipped with a ball-bearing swivel for ease of handling
- Hoses: 3/4" min ID minimum up to 75 ft., 1" min ID up to 200 ft., and 1-1/2" min ID over 200 ft. Use largest diameter at pump. Hoses rated to 2X maximum pump pressure. Hose lining should be BUNA-N jacketed to prevent moisture contamination. Do not use a host that has been used for Acrylics. The liner will absorb moisture and start the silicone cure process.
- Orifice Tip: .030" .50" diameter, wide angled fan angle of 40 to 50 degrees is recommended. A reversible self-cleaning type nozzle is also recommended. Exact office size will vary with temperature of the material and ambient temperatures.
- Brush: No reduction necessary. Use synthetic filament brushes. Do not over-brush as material may start to pull.
- Roller: No reduction necessary. Use 1-1/4" nap synthetic rollers.
   Keep a wet edge to avoid pulling. Avoid rapid rolling which can cause bubbling.
- Spraying: When spraying material should be at least 50°F (10°C).

## Mixing

No thinning or reduction is necessary.

## **Surface Preparation**

The substrate must be free of areas of ponding water, ice, snow, rain or dew, dirt, dust, grease, oil, foreign contaminants or other debris that would inhibit adhesion of coating. If such conditions exist, the roof surfaces should be properly prepared and cleaned using the specified IB cleaning solution in order to receive the new coating system.

Mildew must be removed by power washing and scrubbing with a bleach solution of 1 part bleach and 2 parts water. Repeat if necessary. Rinse thoroughly and allow to dry.

Most substrates require a compatible primer to be applied prior to the application of the coating. Contact IBRS Technical Department at 800-426-1626 for recommendations regarding specific applications

## **Application**

Seam Treatment: Apply IB Silicone Coating over the seam in a 56 wet mil application at 3.5 gallons (13.23 L) per 100 square feet and feather in with a chip brush to an approximate width of 2" wide.

Coating: Apply IB Silicone Coating over the properly prepared substrate or compatible base coat at the rate of 1.0–3.0 gallons (3.78–11.34 L) per 100 square feet (16-48 wet mils) after the primer or base coat has cured or at the total rate of 4.0 gallons (15.12 L) per 100 square feet (64 wet mils) in two passes of 2.0 gallons (7.56 L) per 100 square feet (32 wet mils) per pass. Do not exceed 3.5 gallons (13.23 L) per 100 square feet in a single pass. When applying in separate applications, apply at right angles to the previous coat. Coating must be evenly applied and pinhole-free. Before applying 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 application of subsequent coats.

## Do not use as a base coat over asphaltic surfaces.

Adhesion Test: Adhesion of the IB Silicone Coating should always be checked. Apply 6"–12" square of the coating and embed a piece of IB Fabric into the coating, leaving a minimum 2" tail of the fabric exposed.

Allow 2-3 days for the coating to cure and perform a 90° pull test of the fabric tail to test adhesion of the coating to the substrate.

#### Limitations

- Refer to Substrate Preparation guidelines for proper preparation, cleaning and primer roof with any applicable bond enhancing primer before commencing with application of IB Silicone Coatings
- This product cures by water evaporation only. Do not attempt to apply
  product when weather conditions are not conducive to drying. Refer to
  temperature and relative humidity precautions.
- Application of materials with power spray equipment will requiring some masking and erection of wind screens to prevent over spray occurrences and damage to surrounding structures, surfaces, vehicles, property or persons.

#### Clean Up

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

#### Disposal

Empty containers must be disposed of in an approved landfill in accordance with local, state, and federal regulations.

#### Caution

Avoid prolonged and repeated contact with skin. Do not take internally. Avoid eye contact as this material has adhesive properties. Refer to product Safety Data Sheet (SDS) for additional information pertaining to this product and prior to use or handling.

#### Disclaimer

All values given are approximate and are subject to change without notice. There is no implied or express warranty given through these values or statements, nor are there any assertions that the product purchased has been individually tested to conform to these standards. Testing is performed on a random basis by "in-house" and independent "third party" evaluation for the purpose of classification and or approval. Acceptance, purchase and selection of these products are the sole responsibility of the buyer or buyer's representative. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of the product only.

## LIMITED PRODUCT WARRANTY

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