

SILVER-BRITE® HI-HEAT SILICONE ALKYD ALUMINUM PAINT

B59S8

Revised: October 23, 2014

PRODUCT INFORMATION

2.44

PRODUCT DESCRIPTION

SILVER-BRITE HI-HEAT SILICONE ALKYD ALUMINUM PAINT is a heat cured, interior/exterior, ready mixed, silicone resin, modified with an alkyd and reinforced with 325-mesh extra fine aluminum flakes.

- For service temperatures between 500°F (260°C)-1000°F (537°C)
- Heat reflective
- · Resists discoloration
- · Brush, roll, or spray application

PRODUCT CHARACTERISTICS

Finish: Aluminum Sheen

Color: Aluminum

Volume Solids: $25\% \pm 2\%$

Weight Solids: $42\% \pm 2\%$

VOC: 637 g/L; 5.32 lb/gal

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils (microns)	3.0 (75)	4.0 (100)
Dry mils (microns)	0.75 (19)	1.0 * (25*)
~Coverage sq ft/gal (m²/L)	400 (9.8)	535 (13.1)
Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft	400 (9.8)	

* Critical

Drying Schedule @ 3.0 mils wet (75 microns):

50% RH

To touch: 2 hours 1 hour 30 minutes **To recoat:** 3 hours 2 hours 1 hour **To cure:** Air dry 24 hours (all temperatures)

Slowly raise heat to operating temperature, taking about 1 hour going through 400°F (204°C) - 500°F (260°C) range. Requires heat cure.

Drying time is temperature, humidity, and film thickness dependent.

Shelf Life: 36 months, unopened

Store indoors at 50°F (10°C) to

100°F (38°C).

Flash Point: 103°F (39°C), PMCC
Reducer: Not recommended
Clean Up: Mineral Spirits, R1K4

RECOMMENDED USES

For use over prepared steel surfaces in high temperature (between 500°F/260°C and 1000°F/537°C) environments.

- Boilers
- · Heat exchangers
- Breechings
- Piping
- Exhausts
- Stacks
- Exterior / interior
- Industrial mufflers

PERFORMANCE CHARACTERISTICS

- · Heat reflective
- Dry heat resistant to 1000°F (537°C)
- Long term protection against weathering and moisture
- · Ultraviolet light resistant
- · Interior or exterior use
- Maintains "sheen"

continued on back



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RECOMMENDED SYSTEMS

Dry Film Thickness / ct. Mils (Microns)

Steel, interior:

1-2 cts. Silver-Brite Hi-Heat Silicone 0.75-1.0 (19-25)

Alkyd Aluminum Paint

Total dft: 0.75-2.0 (19-50)

NOTE: Requires heat cure see instructions under "Drying

Schedule"

Steel, exterior:

Silver-Brite Hi-Heat Silicone 2 cts. 0.75-1.0 (19-25)

Alkyd Aluminum Paint

Total dft: 1.5-2.0 (40-50)

NOTE: Requires heat cure see instructions under "Drying

Schedule"

The systems listed above are representative of the product's use, other systems may be appropriate.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

Iron & Steel: SSPC-SP10/NACE 2

0.5-1.0 mil (13-25 microns)

profile

Surface Preparation Standards							
	Condition of Surface	ISO 8501-1 BS7079:A1	Swedish Std. SIS055900	SSPC	NACE		
White Metal Near White Metal		Sa 3 Sa 2.5	Sa 3 Sa 2.5	SP 5 SP 10	1		
Commercial Blast Brush-Off Blast		Sa 2 Sa 1	Sa 2 Sa 1	SP 6 SP 7	3		
Hand Tool Cleaning	Rusted Pitted & Rusted	C St 2 D St 2	C St 2 D St 2	SP 2 SP 2	-		
Power Tool Cleaning	Rusted Pitted & Rusted	C St 3 D St 3	C St 3 D St 3	SP 3 SP 3	-		

TINTING

Do not tint.

APPLICATION CONDITIONS

50°F_. (10°C) minimum, 120°F (49°C) Temperature:

maximum

(air, surface, and material) At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging: 1 gallon (3.78L) containers

 9.20 ± 0.2 lb, 1.1 Kg/L Weight:

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

WARRANTY

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY SHERWIN-WILLIAMS, EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MER-CHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

DISCLAIMER

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Sherwin-Williams representative to obtain the most recent Product Data Information and Application Bulletin.



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APPLICATION BULLETIN

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SURFACE PREPARATIONS

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure adequate adhesion.

Iron & Steel (atmospheric service)

Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (0.5-1.0 mil/13-25 microns maximum). Coat any bare steel the same day as it is cleaned or before flash rusting occurs.

APPLICATION CONDITIONS

Temperature: 50°F (10°C) minimum, 120°F (49°C)

maximum

(air, surface, and material)

At least 5°F (2.8°C) above dew point

Relative humidity: 85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compliant with existing VOC regulations and compatible with the existing environmental and application conditions.

ReducerNot recommended

Clean UpMineral Spirits, R1K4

Airless Spray

Conventional Spray

Brush

Brush.....Natural Bristle

Roller

Cover1/4" woven with solvent resistant core

If specific application equipment is not listed above, equivalent equipment may be substituted.



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APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Lightly stir before use. Do not shake with mechanical shaker or overly agitate, as a dull, non-uniform, mottled appearance will result.

Special care should be exercised while using this product for maximum performance. Film thickness and surface preparation are critical. Be especially concerned at lap areas and when using airless spray. Excessive film thickness will cause blistering and peeling. Insufficient film thickness may lead to premature rusting of the surface. Always apply to cool surfaces (50°F/10°C-100°F/38°C).

Apply paint at the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat: Minimum Maximum Wet mils (microns) 3.0 (75) 4.0 (100) Dry mils (microns) 0.75 (19) 1.0* (25*) ~Coverage sq ft/gal (m²/L) 400 (9.8) 535 (13.1) Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft 400 (9.8)

* Critical

<u>Drying Schedule @ 3.0 mils wet (75 microns):</u>

@ 50°F/10°C	@ 77°F/25°C	@ 100°F/38°C
	50% RH	

To touch: 2 hours 1 hour 30 minutes To recoat: 2 hours 2 hours 1 hour

To cure: Air dry 24 hours (all temperatures) Slowly raise heat to operating temperature, taking about 1 hour going through 400°F (204°C) - 500°F (260°C) range. Requires heat cure.

Drying time is temperature, humidity, and film thickness dependent.

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with Mineral Spirits, R1K4. Clean tools immediately after use with Mineral Spirits, R1K4. Follow manufacturer's safety recommendations when using any solvent.

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Performance Tips

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle.

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with Mineral Spirits, R1K4.

Always apply to a cool surface 50°F (10°C) - 100°F (38°C)

No primer is required.

No reduction of material is recommended as it can affect film build, appearance, and adhesion.

Do not apply greater than 1.0 mils (25 microns) dft/ct.

Not intended for use on interior of flues, stacks, etc.

Refer to Product Information sheet for additional performance characteristics and properties.

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