

B59S4

Revised 10/10

PRODUCT INFORMATION

2.40

PRODUCT DESCRIPTION

INDUSTRIAL ALUMINUM PAINT is an economical, one-package, interior / exterior, general purpose, leafing aluminum paint which produces a chrome-like uniform appearance and provides heat resistance up to 400°F (204°C).

- · Ultraviolet light resistant
- Long term protection against weathering and moisture
- Heat reflective
- · Resists discoloration
- · Brush, roll, or spray application

PRODUCT CHARACTERISTICS

Finish: Aluminum Sheen

Color: Aluminum

Volume Solids: $40\% \pm 2\%$

Weight Solids: $49\% \pm 2\%$

VOC calculated: <475 g/L; 3.96 lb/gal

Recommended Spreading Rate per coat: **Minimum** Maximum Wet mils (microns) **3.0** (75) 4.0 (100) Dry mils (microns) **1.0** (25) **1.5*** (40)* ~Coverage sq ft/gal (m²/L) **428** (10.5) **640** (15.7) Theoretical coverage sq ft/gal 640 (15.7) (m²/L) @ 1 mil / 25 microns dft *DFT is 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: | 6 hours | 1-2 hours | 30 minutes | |
| To handle: | 24 hours | 4-6 hours | 2 hours | |
| To recoat: | 24 hours | 18 hours | 6 hours | |
| To cure: | 10 days | 7 days | 3 days | |
| Drying time is temperature, humidity, and film thickness dependent. | | | | |

Shelf Life: 36 months, unopened

Store indoors at 40°F (4.5°C)

to 100°F (38°C).

Flash Point: 92°F (33°C), PMCC
Reducer: Not recommended
Clean Up: Mineral Spirits, R1K4

RECOMMENDED USES

For use over prepared steel surfaces in normal and high temperature (up to 400°F / 204°C) environments.

- Furnaces
- · Storage tank exteriors
- Bridges
- Radiators
- Fencing
- Piping

Performance Characteristics

Substrate*: Steel

Surface Preparation*: SSPC-SP6/NACE 3

System Tested*:

2 cts. Industrial Aluminum Paint @ 1.0 mil (25 microns) dft/ct *unless otherwise noted below

| Test Name | Test Method | Results |
|--|--|---------------|
| Abrasion Resistance | ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load | 180 mg loss |
| Adhesion | ASTM D4541 | 200 psi |
| Direct Impact Resistance | ASTM D2794 | 30 in. lbs. |
| Dry Heat Resistance | ASTM D2485 | 400°F (204°C) |
| Exterior Durability | 1 year at 45° South | Passes |
| Flexibility | ASTM D522, 180° bend, 1/8" mandrel | Passes |
| Moisture Condensation Resistance | ASTM D4585, 100°F (38°C), 500 hours | Passes |
| Pencil Hardness | ASTM D3363 | В |
| Salt Fog Resistance | ASTM B117, 500 hours | Passes |
| Thermal Shock | ASTM D2246, 200 cycles | Excellent |



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| | | D E'' T'' | |
|--------|--|----------------------|-----------|
| | | Dry Film Thi Mils | (Microns) |
| | 200°F (93°C)-400°F (204°C): Industrial Aluminum Paint | 1.0-1.5 | (25-40) |
| Steel, | rusted, below 200°F (93°C): | | |
| 1 ct. | Kem Bond HS | 2.0-5.0 | (50-125) |
| 2 cts. | Industrial Aluminum Paint | 1.0-1.5 | (25-40) |
| Alumi | num, below 200°F (93°C): | | |
| 1 ct. | DTM Wash Primer | 0.7-1.3 | (18-32) |
| 2 cts. | Industrial Aluminum Paint | 1.0-1.5 | (25-40) |
| Concr | ete Block, below 200°F (93°C): | | |
| 1 ct | Heavy Duty Block Filler | 10.0-18.0 | (250-450) |

| 1 ct. | Heavy Duty Block Filler | 10.0-18.0 | (250-450) |
|--------|---------------------------|-----------|-----------|
| 2 cts. | Industrial Aluminum Paint | 1.0-1.5 | (25-40) |

Galvanized Metal, below 200°F (93°C):

| 1 ct. | Galvite HS | 3.0-4.5 | (75-112) |
|--------|---------------------------|---------|----------|
| 2 cts. | Industrial Aluminum Paint | 1.0-1.5 | (25-40) |

Insulated Pipe and Ductwork, interior below 130°F (54°C):

| 1 ct. | PrepRite 200 Latex Primer | 1.5 | (40) |
|--------|---------------------------|---------|---------|
| 2 cts. | Industrial Aluminum Paint | 1.0-1.5 | (25-40) |

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:

SSPC-SP10, 1 mil profile >200°F (93°C) SSPC-SP6, 1 mil profile <200 °F (93°C) SSPC-SP1 Iron & Steel: Aluminum: SSPC-SP1 SSPC-SP13/NACE 6 or ICRI No. 310.2, Galvanizing Concrete Block & Masonry: CSP 1-3

Primer required

| Surface Preparation Standards | | | | | |
|--|--|--------------------------------------|--------------------------------------|-------------------------------|------------------|
| | Condition of Surface | ISO 8501-1 BS7079:A1 | Swedish Std. SIS055900 | SSPC | NACE |
| White Metal Near White Metal Commercial Blast Brush-Off Blast | | Sa 3 Sa 2.5 Sa 2 Sa 1 | Sa 3 Sa 2.5 Sa 2 Sa 1 | SP 5 SP 10 SP 6 SP 7 | 1 2 3 4 |
| Hand Tool Cleaning Power Tool Cleaning | Rusted Pitted & Rusted Rusted Pitted & Rusted | C St 2 D St 2 C St 3 D St 3 | C St 2 D St 2 C St 3 D St 3 | SP 2 SP 2 SP 3 SP 3 | - |

TINTING

Do not tint.

APPLICATION CONDITIONS

Temperature: 40°F (4.5°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

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging: 5 gallon (3.78L) containers

Weight: 7.52 ± 0.2 lb/gl, .9 Kg/L

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 and Steel (below 200°F (93°C))

Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6 (1 mil / 25 micron profile). Remove all oil and grease from the surface by Solvent Cleaning per SSPC-SP1.

Iron and Steel (200°F (93°C)-400°F(204°C))

Minimum surface preparation is Near-White Blast Cleaning per SSPC-SP10 (1 mil / 25 micron profile). Apply 2 coats Industrial Aluminum Paint.

Aluminum (below 200°F (93°C))

Remove all oil, grease, dirt, oxide, and other foreign material by Solvent Cleaning per SSPC-SP1. Use DTM Wash Primer.

Concrete Block (below 200°F (93°C))

For surface preparation, refer to SSPC-SP13/NACE 6 or ICRI No. 310.2, CSP 1-3. Surface should be thoroughly clean and dry. Surface temperatures must be at least 55°F before filling. Use Heavy Duty Block Filler. The filler must be thoroughly dry before topcoating per manufacturer's recommendations.

Galvanized Metal (below 200°F (93°C))

Allow to weather a minimum of 6 months prior to coating. Solvent Clean per SSPC-SP1 and prime with Galvite HS.

When weathering is not possible or the surface has been treated with chromates or silicates, first Solvent Clean per SSPC-SP1 and apply a test area using Galvite HS as a primer coat. Allow paint to dry one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing below 200°F (93°C) requires a minimum of Hand Tool Cleaning per SSPC-SP2. Prime rusty areas with Kem Bond HS.

Insulated Pipe & Ductwork (interior below 130°F (54°C))

Primer with ProMar 200 Latex Wall Primer.

NOTE: Insulated pipe and ductwork 130°F (54°C)-400°F (204°C), apply 2 coats Industrial Aluminum Paint directly to surface.

Previously Painted Surface

If in sound condition, clean the surface of all foreign material. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface.

| Surface Preparation Standards | | | | | |
|--|-------------------------------------|--------------------------------|--------------------------------|-------------------------------|------------------|
| Condition of Surface ISO 8501-1 Swedish Std. Surface BS7079:A1 SIS055900 SSPC NACE | | | | | |
| White Metal Near White Metal Commercial Blast Brush-Off Blast | | Sa 3 Sa 2.5 Sa 2 Sa 1 | Sa 3 Sa 2.5 Sa 2 Sa 1 | SP 5 SP 10 SP 6 SP 7 | 1 2 3 4 |
| Hand Tool Cleaning | Rusted Pitted & Rusted Rusted | | C St 2 D St 2 C St 3 | SP 2 SP 2 SP 3 | - |
| Power Tool Cleaning | Pitted & Rusted | D St 3 | D St 3 | SP 3 | - |

APPLICATION CONDITIONS

40°F (4.5°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

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

| Pressure | 2000 psi |
|----------|----------|
| Hose | 1/4" ID |
| Tip | 010"012" |
| Filter | 60 mesh |

Conventional Spray

| Gun | Binks 95 |
|----------------------|----------|
| Fluid Nozzle | 63C |
| Air Nozzle | 63PB |
| Atomization Pressure | 50 psi |
| Fluid Pressure | 20 psi |

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.

Best when applied to a cool surface 40°F (4.5°C) - 90°F (32°C)

Recommended Spreading Rate per coat: Minimum Maximum Wet mils (microns) 3.0 (75) 4.0 (100) Dry mils (microns) 1.0 (25) 1.5* (40)* ~Coverage sq ft/gal (m²/L) 428 (10.5) 640 (15.7) Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft 640 (15.7) *DFT is critical 428 (10.5) 428 (10.5)

| Drying Schedule @ 3.0 mils wet (75 microns): | | | | |
|---|-------------|-------------|--------------|--|
| | @ 50°F/10°C | @ 77°F/25°C | @ 100°F/38°C | |
| | | 50% RH | | |
| To touch: | 6 hours | 1-2 hours | 30 minutes | |
| To handle: | 24 hours | 4-6 hours | 2 hours | |
| To recoat: | 24 hours | 18 hours | 6 hours | |
| To cure: | 10 days | 7 days | 3 days | |
| 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.

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.

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.

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

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

Do not apply greater than 1.5 mils (40 microns) dft/ct.

Best when applied to a cool surface 40°F (4.5°C) - 90°F (32°C)

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

SAFETY PRECAUTIONS

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