

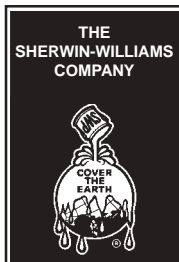


*Industrial
and
Marine
Coatings*

INDUSTRIAL ENAMEL

B54 SERIES

PRODUCT INFORMATION		Revised 1/02																																
PRODUCT DESCRIPTION		RECOMMENDED USES																																
<p>INDUSTRIAL ENAMEL is a medium oil/alkyd all-purpose enamel with a durable color pigment system. Designed for interior and exterior use.</p> <ul style="list-style-type: none"> • Dries fast and allows equipment to be placed back in service quickly • Chip and flake resistant • High gloss makes it resistant to dirt • Suitable for use in USDA inspected facilities • Apply down to 40°F 		<p>For use over prepared substrates in industrial environments:</p> <ul style="list-style-type: none"> • Exterior/interior all-purpose maintenance enamel • Safety and pipe marking enamel • Economical machinery and equipment finish • Interior wall and ceiling enamel • A utility enamel for multiple uses, including equipment, fixtures, conveyors, fire escapes, window frames, pumps, safety markings, wood floors, railings, steel support structures, blowers, pipe racks, pipe identification, channels and bracing • Conforms to AWWA D102-97 Outside Coating System #1, #2, and #3. 																																
PRODUCT CHARACTERISTICS		PERFORMANCE CHARACTERISTICS																																
<p>Finish: Gloss</p> <p>Color: Wide range of colors available including safety colors</p> <p>Volume Solids: 44% ± 2%, may vary by color Pure White</p> <p>Weight Solids: 61% ± 2%, may vary by color Pure White</p> <p>VOC (calculated): 440 g/L; 3.67 lb/gal Pure White</p> <p>Recommended Spreading Rate per coat:</p> <p>Wet mils: 4.5 - 9.0 Dry mils: 2.0 - 4.0 Coverage: 175 - 350 sq ft/gal approximate</p> <p>NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.</p> <p>Drying Schedule @ 4.6 mils wet @ 50% RH:</p> <table border="0"> <tr> <td></td> <td style="text-align: center;">@50°F</td> <td style="text-align: center;">@ 77°F</td> <td style="text-align: center;">@110°F</td> </tr> <tr> <td>To touch:</td> <td>3 hours</td> <td>1-2 hours</td> <td>30 minutes</td> </tr> <tr> <td>Tack free:</td> <td>8 hours</td> <td>4-5 hours</td> <td>4 hours</td> </tr> <tr> <td>To recoat:</td> <td>12 hours</td> <td>8 hours</td> <td>3 hours</td> </tr> <tr> <td>To cure:</td> <td>7 days</td> <td>7 days</td> <td>3 days</td> </tr> </table> <p>Drying time is temperature, humidity and film thickness dependent.</p> <p>Shelf Life: 36 months, unopened, at 77°F</p> <p>Flash Point: 105°F, PMCC</p> <p>Reducer: Not recommended</p> <p>Clean Up: Mineral Spirits, R1K4</p>			@50°F	@ 77°F	@110°F	To touch:	3 hours	1-2 hours	30 minutes	Tack free:	8 hours	4-5 hours	4 hours	To recoat:	12 hours	8 hours	3 hours	To cure:	7 days	7 days	3 days	<p>System Tested: (unless otherwise indicated) Substrate: Steel Surface Preparation: SSPC-SP6</p> <p>1 ct. Kem Kromik Universal Metal Primer @ 3.0 - 4.0 mils dft 1 ct. Industrial Enamel @ 3.0 mils dft</p> <p>Abrasion Resistance: Method: ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load Result: 180 mg loss</p> <p>Adhesion: Method: ASTM D4541 Result: 290 psi</p> <p>Corrosion Weathering: Method: ASTM D5894, 6 cycles, 2016 hours Result: Rating 10 per ASTM D610 for rusting Rating 10 per ASTM D714 for blistering</p> <p>Direct Impact Resistance: Method: ASTM D2794 Result: 68 in lb</p> <p>Dry Heat Resistance: Method: ASTM D2485 Result: 200°F</p> <p>Flexibility: Method: ASTM D522, 180° bend, 3/16" mandrel Result: Passes</p> <p>Pencil Hardness: Method: ASTM D3363 Result: 3B</p> <p>Provides performance comparable to products formulated to federal specifications:</p> <table border="0"> <tr> <td>DOD-E-698C</td> <td>DOD-E-700A</td> <td>DOD-E-115C</td> </tr> <tr> <td>MIL-E-15090</td> <td>TT-E-487E</td> <td>TT-E-489H</td> </tr> <tr> <td>TT-E-491C</td> <td>TT-P-37D</td> <td>TT-P-81E</td> </tr> <tr> <td>TT-P-102F</td> <td></td> <td></td> </tr> </table>	DOD-E-698C	DOD-E-700A	DOD-E-115C	MIL-E-15090	TT-E-487E	TT-E-489H	TT-E-491C	TT-P-37D	TT-P-81E	TT-P-102F		
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PRODUCT INFORMATION

RECOMMENDED SYSTEMS

Steel:

- 1 ct. Kem Kromik Universal Metal Primer
@ 3.0 - 4.0 mils dft
2 cts. Industrial Enamel @ 2.0 - 4.0 mils dft/ct

Aluminum:

- 1 ct. DTM Wash Primer @ 0.7 - 1.3 mils dft
2 cts. Industrial Enamel @ 2.0 - 4.0 mils dft/ct

Concrete Block:

- 1 ct. Heavy Duty Block Filler @ 10.0 - 18.0 mils dft
2 cts. Industrial Enamel @ 2.0 - 4.0 mils dft/ct

Concrete Floors:

- 1 ct. Concrete and Terrazzo Sealer (reduced as needed)
2 cts. Industrial Enamel @ 2.0 - 4.0 mils dft/ct

Galvanized Metal:

- 1 ct. Galvite HS @ 3.0 - 4.5 mils dft
2 cts. Industrial Enamel @ 2.0 - 4.0 mils dft/ct

Wood, including floors:

- 2 cts. Industrial Enamel @ 2.0 - 4.0 mils dft/ct

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-SP2
- * Aluminum: SSPC-SP1
- * Galvanizing: SSPC-SP1
- * Concrete & Masonry: SSPC-SP13/NACE 6
- Wood, interior: Clean, smooth, dust free

*Primer required

TINTING

Tint with Blend-A-Color Toner at 75% strength. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

APPLICATION CONDITIONS

- Temperature: 40°F minimum, 120°F maximum
(air, surface, and material)
At least 5°F above dew point
- Relative humidity: 85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

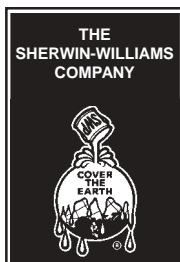
- Packaging: 1 and 5 gallon containers
- Weight per gallon: 9.4 ± 0.2 lb, may vary with color

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.

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



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APPLICATION BULLETIN

Revised 1/02

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.

Iron & Steel

Minimum surface preparation is Hand Tool Clean per SSPC-SP2. Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. For better performance, use Commercial Blast Cleaning per SSPC-SP6, blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils). Prime any bare steel within 8 hours or before flash rusting occurs.

Aluminum

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

Galvanized Steel

Allow to weather a minimum of six months prior to coating. Solvent Clean per SSPC-SP1 (recommended solvent is VM&P Naphtha). 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 patch. Allow paint to dry at least one week before testing adhesion. If adhesion is poor, brush blasting per SSPC-SP7 is necessary to remove these treatments. Rusty galvanizing requires a minimum of Hand Tool Cleaning per SSPC-SP2, prime the area the same day as cleaned.

Masonry and Concrete

For surface preparation, refer to SSPC-SP13/NACE 6. Surfaces should be thoroughly clean and dry. Concrete and mortar must be cured at least 28 days @ 75°F. Remove all loose mortar and foreign material. Surface must be free of laitance, concrete dust, dirt, form release agents, moisture curing membranes, loose cement and hardeners. Fill bug holes, air pockets and other voids with a cement patching compound. Weathered masonry and soft or porous cement board must be brush blasted or power tool cleaned to remove loosely adhering contamination and to get to a hard, firm surface. Laitance must be removed by etching with a 10% muriatic acid solution and thoroughly neutralized with water.

Wood

Surface must be clean, dry, and sound. Paint as soon as possible. No painting should be done immediately after a rain or during foggy weather. Knots and pitch streaks must be scraped, sanded and spot primed. All nail holes or small openings must be properly caulked. Sand to remove any loose or deteriorated surface wood and to obtain a proper surface profile. Self priming.

Previously Painted Surfaces

If in sound condition, clean the surface of all foreign material. Smooth, hard or glossy coatings and surfaces should be dulled by abrading the surface. Apply a test area, allowing paint to dry one week before testing adhesion. If adhesion is poor, additional abrasion of the surface and/or removal of the previous coating may be necessary. Re-test surface for adhesion. If paint is peeling or badly weathered, clean surface to sound substrate and treat as a new surface as above.

APPLICATION CONDITIONS

Temperature: 40°F minimum, 120°F maximum (air, surface, and material)
At least 5°F 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 compatible with the existing environmental and application conditions.

Reducer Not recommended

Clean Up Mineral Spirits, R1K4

Airless Spray

Pressure 2500 psi
Hose 1/4" ID
Tip015"
Filter 100 mesh

Conventional Spray

Gun Binks 95
Fluid Nozzle 66
Air Nozzle 63PB
Atomization Pressure .. 50 psi
Fluid Pressure 20-25 psi

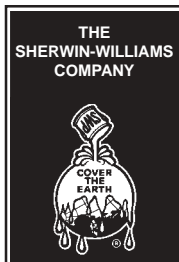
Brush

Brush Natural Bristle

Roller

Cover 3/8" woven with phenolic core

If specific application equipment is listed above, equivalent equipment may be substituted.



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APPLICATION BULLETIN

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly by boxing and stirring before use.

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

Recommended Spreading Rate per coat:

Wet mils:	4.5 - 9.0
Dry mils:	2.0 - 4.0
Coverage:	175 - 350 sq ft/gal approximate

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 4.6 mils wet @ 50% RH:

	@ 50°F	@ 77°F	@ 110°F
To touch:	3 hours	1-2 hours	30 minutes
Tack free:	8 hours	4-5 hours	4 hours
To recoat:	12 hours	8 hours	3 hours
To cure:	7 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.

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.

Deep tinted colors may exhibit burnishing characteristics.

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

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.

SAFETY PRECAUTIONS

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