

Revised: January 15, 2015

DTM BONDING PRIMER

B66A50

PRODUCT INFORMATION

1.22

PRODUCT DESCRIPTION

DTM BONDING PRIMER is a waterborne, acrylic emulsion, adhesion-promoting bonding primer. Designed to be part of a system for coating pre-finished metal siding (such as those containing Fluorocarbon [Kynar], Silicone Polyester, or Polyester Polymers), or other hard, slick, glossy surfaces, and previously painted surfaces.

- Must be topcoated
- · Low odor, low VOC
- · Oustanding application characteristics

PRODUCT CHARACTERISTICS

Finish: Flat

Color: Off White

Volume Solids: 42% ± 2%

Weight Solids: 57% ± 2%

VOC (EPA Method 24): <100 g/L; 0.83 lb/gal

Recommended Spreading Rate per coat:				
	Minimum		Maximum	
Wet mils (microns)	5.0	125	12.0	300
Dry mils (microns)	2.0	50	5.0	125
~Coverage sq ft/gal (m²/L)	135	3.3	335	8.2
Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft	672	16.46		

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

Drying Schedule @ 8.0 mils wet (200 microns):

	@ 50°F/10°C	@ 77°F/25°C	@ 120°F/49°C
		50% RH	
To touch:	1 hour	40 minutes	20 minutes
To handle:	6 hours	4 hours	2 hours
To recoat:	8 hours	4 hours	2 hours
To cure:	7 days	4 days	3 days
Drying time is to	emperature, humidi	ity, and film thickn	ess dependent.

Shelf Life:

36 months, unopened Store indoors at 50°F (10°C) to

100°F (38°C)

>200°F (93°C), PMCC, mixed **Flash Point:**

Reducer/Clean Up: Water

RECOMMENDED USES

For use over prepared:

- Pre-Finished Siding such as: Fluorocarbons (Kynar)
- Polyester Polymers
- Silicone Polyester
- Previously painted surfaces.
- Acceptable for use in high performance architectural applications.
- Suitable for use in USDA inspected facilities.

Performance Characteristics

Substrate*: Prefinished siding Surface Preparation*: SSPC-SP1

System Tested*:

1 ct. DTM Bonding Primer @ 3.0 mils (75 microns) *unless otherwise noted below

Test Name	Test Method	Results
Adhesion	ASTM D4541	325 psi
Direct Impact Resistance	ASTM D2794	160 in. lbs.
Flexibility	ASTM D522, 180° bend, 1/8" mandrel	Passes
Moisture Condensation Resistance	ASTM D4585, 100°F (38°C), 500 hours	Excellent
Pencil Hardness	ASTM D3363	3B
Salt Fog Resistance	ASTM B117, 1000 hours	Excellent
Thermal Shock	ASTM D2246, 15 cycles	Passes



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RECOMMENDED SYSTEMS

Dry Film Thickness / ct. <u>Mils</u> (<u>Microns</u>)

Prefinished Siding:

Fluorocarbon, Silicon Polyester, or Polyester Polymers

1 ct. DTM Bonding Primer 2.0-5.0 (50-125) Pro Industrial DTM Acrylic Coating 2.5-4.0 (63-100)

or Bond-Plex WB Acrylic

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or DTM Primer/Finish

or Fast Clad HB Acrylic

or HydroGloss

or Metalatex Semi-Gloss

or Pro Industrial Acrylic

or Pro Industrial Multi-Surface Acrylic

or Sher-Cryl HPA

Previously Painted Hard, Slick or Glossy Surfaces:

1 ct. DTM Bonding Primer 2.0-5.0 (50-125)

2 cts. Pro Industrial DTM Acrylic Coating 2.5-4.0 (63-100)

or Bond-Plex WB Acrylic

or DTM Primer/Finish

or Fast Clad HB Acrylic

or HydroGloss

or Metalatex Semi-Gloss

or Pro Industrial Acrylic

or Pro Industrial Multi-Surface Acrylic

or Sher-Cryl HPA

Always check for compatibility of the previously painted surface with the new coating by appying a test patch of 2 - 3 square feet. Allow to dry thoroughly for 1 week before checking adhesion.

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

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.

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.

Do not use hydrocarbon solvents for cleaning.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:

Prefinished Siding: SSPC-SP1
Previously Painted: SSPC-SP1
Surface Propagation Standards

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

TINTING

Do not tint.

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

Refer to product Application Bulletin for detailed application information.

ORDERING **I**NFORMATION

Packaging: 1 (3.78L) and 5 (18.9L) gallon containers

Weight per gallon: 11.2 ± 0.2 lb 1.34 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 MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.



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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.

Do not use hydrocarbon solvents for cleaning.

Pre-Finished Sidina:

(Fluorocarbon, Silicone Polyester, and Polyester Polymers)

Remove oil, grease, dirt, oxides, and other contaminants from the surface by cleaning per SSPC-SP1 or water blasting per NACE Standard RP-01-72 (caution: excessive blasting pressure may cause warping, use caution). Always check for compatibility of the previously painted surface with the new coating by applying a test patch of 2 - 3 square feet. Allow to dry thoroughly for 1 week before checking adhesion.

Previously Painted Surfaces:

Remove oil, grease, dirt, oxides, and other contaminants from the surface by cleaning per SSPC-SP1 or water blasting per NACE Standard RP-01-72 (caution: excessive blasting pressure may cause warping, use caution). Always check for compatibility of the previously painted surface with the new coating by applying a test patch of 2 - 3 square feet. Allow to dry thoroughly for 1 week before checking adhesion.

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.

Reducer/Clean Up:Water

Airless Spray

Pressure	2400 psi
Hose	1/4" - 3/8" ID
Tip	017"019"
Filter	60 mesh

Reduction.....As needed up to 12-1/2% by volume

Conventional Spray

Gun	Binks 95
Fluid Nozzle	66
Air Nozzle	63PB
Atomization Pressure	60 psi
Fluid Pressure	25 psi

Reduction.....As needed up to 12-1/2% by volume

Brush

Brush.....Nylon/Polyester
Reduction....Not recommended

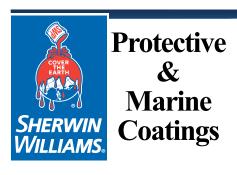
Roller

Cover3/8" woven solvent resistant core

Reduction.....Not recommended

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

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



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APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly to a uniform consistency with low speed power agitation prior to use.

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

Recommended Spreading Rate per coat:

	Minimum		Maximum	
Wet mils (microns)	5.0	125	12.0	
Dry mils (microns)	2.0			125
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Drying Schedule @ 8.0 mils wet (200 microns):

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		50% RH	
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To handle:	6 hours	4 hours	2 hours
To recoat:	8 hours	4 hours	2 hours
To cure:	7 days	4 days	3 days
Drying time is te	emperature, humid	ity, and film thickn	ess dependent.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with Mineral Spirits to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using Mineral Spirits.

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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

During the early stages of drying, the coating is sensitive to rain, dew, high humidity, and moisture condensation. Plan painting schedules to avoid these influences during the first 16-24 hours of curing.

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.

Excessive reduction of material can affect film build, appearance, and adhesion.

DTM Bonding Primer is extremely sensitive to hydrocarbon containing solvents. When cleaning the surface per SSPC-SP1, use only an emulsifying industrial detergent, followed by a water rinse. Do not use hydrocarbon containing solvents.

Product must be topcoated.

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

Do not use hydrocarbon solvents for cleaning.

Always check for compatibility of the previously painted surface with the new coating by appying a test patch of 2 - 3 square feet. Allow to dry thoroughly for 1 week before checking adhesion.

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

SAFETY PRECAUTIONS

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