Protective & Marine Coatings

STEEL SPEC™ STRUCTURAL STEEL PRIMER

B50AV11 GRAY
B50NV12 BROWNISH RED

Revised: October 26, 2018

PRODUCT INFORMATION

2.48

PRODUCT DESCRIPTION

STEEL SPEC STRUCTURAL STEEL PRIMER is a high solids, rust inhibitive alkyd primer which is free of heavy metals. It is easy to apply by spray, is fast drying and can be topcoated with alkyd and latex coatings. Conforms to CISC/CPMA Standards 1-73a and 2-75.

- Contains no HAPS

PRODUCT CHARACTERISTICS

Finish:	Flat
Color:	Gray and Brownish Red
Volume Solids:	56% ± 2%, may vary by color
Weight Solids:	78% ± 2%, may vary by color
VOC:	<340 g/L; 2.8 lb/gal

Recommended Spreading Rate per coat:

	Minimum	Maximum
Wet mils:	**4.0**	**6.0**
Dry mils:	**2.0**	**3.0**
~Coverage sq ft/gal:	**299**	**448**
Theoretical coverage **sq ft/gal** @ 1 mil dft	**896**	

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

Drying Schedule @ 4.0 mils wet @ 50% RH:

	@ 40°F	@ 77°F	@ 120°F
To touch:	60 minutes	30 minutes	5 minutes
Tack-Free:	2 hours	1.5 hours	10 minutes
Dry-Hard:	2.5 hours	2 hours	45 minutes
To handle:	5 hours	3 hours	1.5 hours
To recoat:	8 hours	3 hours	1.5 hours

If maximum recoat time is exceeded, abrade surface before recoating.
Drying time is temperature, humidity, and film thickness dependent.

Shelf Life:	12 months, unopened Store indoors at 40°F to 100°F.
Flash Point:	95°F, PMCC
Reducer/Clean Up:	Mineral Spirits

RECOMMENDED USES

For architectural / light commercial construction application on steel to protect against atmospheric exposure.

- Interior and exterior use
- Fast drying maintenance alkyd primer
- Lead, chromate, and barium free

According to AISC, shop coat primers are intended for protection for only a short period of exposure in ordinary atmospheric conditions, and is considered a temporary and provisional coating.

Not recommended for immersion service or exposure to acid, alkali's, or strong solvents.

PERFORMANCE CHARACTERISTICS

Substrate*: Steel
Surface Preparation*: SSPC-SP10
System Tested*:
1 ct. Steel Spec Structural Steel Primer @ 2.2 mils dft
1 ct. Steel Spec FD Alkyd @ 3.8 mils dft
*unless otherwise noted below

Test Name	Test Method	Results
Adhesion[1]	ASTM D4541	420 psi
Corrosion Weathering[2]	ASTM D5894, 15 cycles	Rating 10 per ASTM D714 for blistering; Rating 9 per ASTM D610 for rusting; Rating 9 per ASTM D1654 for corrosion
Direct Impact Resistance[3]	ASTM D2794	32 in. lbs
Salt Fog Resistance[4]	ASTM B117, 500 hours	Rating 9 per ASTM D610 for rusting; Rating 9 per ASTM D1654 for corrosion

[1] Primer @ 2.5 mils dft, Topcoat @ 4.4 mils dft
[2] Primer @ 2.1 mils dft, Topcoat @ 3.4 mils dft
[3] Primer @ 2.4 mils dft
[4] Topcoat @ 4.3 mils dft

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RECOMMENDED SYSTEMS

		Dry Film Thickness / ct. Mils
Steel, Alkyd Topcoat:		
1 ct.	Steel Spec Structural Steel Primer	2.0-3.0
1-2 cts.	Industrial Enamel VOC	2.0
Steel, Aluminum Finish:		
1 ct.	Steel Spec Structural Steel Primer	2.0-3.0
1-2 cts.	Silver-Brite Aluminum Paint	2.0
	(Industrial Aluminum Paint also acceptable)	
Steel, Acrylic Topcoat:		
1 ct.	Steel Spec Structural Steel Primer	2.0-3.0
1-2 cts.	Metalatex Semi Gloss	1.5
	or Pro Industrial DTM Acrylic	2.5-4.0
	or Pro Industrial Acrylic	2.0-4.0
Steel, Silicone Alkyd Topcoat:		
1 ct.	Steel Spec Structural Steel Primer	2.0-3.0
1-2 cts.	Steel Master 9500	2.0

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

CLEAN UP INSTRUCTIONS

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

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.

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.

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.

SURFACE PREPARATION

Surfaces must be clean, dry, and in sound condition. Remove all oil, dust, loose rust, loose mill scale or other contamination to ensure good adhesion.

Iron and Steel:
Minimum required surface prep is SSPC-SP2.

Surface Preparation Standards

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

TINTING

Do not tint.

APPLICATION CONDITIONS

Note:	Primer coats used for exterior applications should not be left untopcoated in excess of six months
Temperature:	40ºF minimum, 120ºF maximum (air, surface, material:) At least 5ºF above dew point
Relative humidity:	85% maximum

ORDERING INFORMATION

Packaging:	1 gallon cans, 5 gallon pails and 53 gallon drums
Weight per gallon:	12.50 ± 0.2 lb, may vary by color

APPLICATION METHODS

Brush, conventional spray, and airless spray.

Brush: China bristle
Confined to small areas and touch-up

Conventional Spray:
50 psi atomization pressure, 15-25 psi pressure,
Binks gun: model 18
Air nozzle: 63 PB
Fluid nozzle: 63C or equivalent equipment

Airless Spray:
Unit: 1800-1300 psi pressure
Tip: .015" - .019"
Filter: 60 mesh
Hose: 1/4"

Mixing Instructions:
Mix paint thoroughly by boxing and stirring or mechanically agitate for uniformity and consistency.

Reducer/Clean Up: Mineral Spirits

Reduction:
Airless Spray: None
Conventional Spray: Reduce by up to 5% by volume as necessary to be compatible with the existing application and environmental conditions.