STEEL SPEC™
STRUCTURAL STEEL PRIMER

B50AV11
B50NV12

Product Information

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:

<table>
<thead>
<tr>
<th>Wet mils:</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>6.0</td>
<td></td>
</tr>
<tr>
<td>Dry mils:</td>
<td>2.0</td>
<td>3.0</td>
</tr>
</tbody>
</table>

~Coverage sq ft/gal:

- Theoretical coverage sq ft/gal @ 1 mil dft: 299, 448
- 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: 60 minutes, 30 minutes, 5 minutes
- @ 77°F: 2 hours, 1.5 hours, 10 minutes
- @ 120°F: 2.5 hours, 2 hours, 45 minutes

- To touch: 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

<table>
<thead>
<tr>
<th>Test Name</th>
<th>Test Method</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adhesion¹</td>
<td>ASTM D4541</td>
<td>420 psi</td>
</tr>
<tr>
<td>Corrosion Weathering²</td>
<td>ASTM D5894, 15 cycles</td>
<td>Rating 10 per ASTM D714 for blistering; Rating 9 per ASTM D610 for rusting; Rating 9 per ASTM D1654 for corrosion</td>
</tr>
<tr>
<td>Direct Impact Resistance³</td>
<td>ASTM D2794</td>
<td>32 in. lbs</td>
</tr>
<tr>
<td>Salt Fog Resistance⁴</td>
<td>ASTM B117, 500 hours</td>
<td>Rating 9 per ASTM D610 for rusting; Rating 9 per ASTM D1654 for corrosion</td>
</tr>
</tbody>
</table>

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
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

<table>
<thead>
<tr>
<th>Condition of Surface</th>
<th>ISO 8501-1</th>
<th>SSPC</th>
<th>NACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Metal</td>
<td>Sa 3</td>
<td>SA 10</td>
<td>1</td>
</tr>
<tr>
<td>Near White Metal</td>
<td>Sa 2 1/2</td>
<td>SA 9</td>
<td>2</td>
</tr>
<tr>
<td>Commercial Blast</td>
<td>Sa 2 1/2</td>
<td>SA 8</td>
<td>3</td>
</tr>
<tr>
<td>Brush-Off Blast</td>
<td>Sa 2 1/2</td>
<td>SA 7</td>
<td>4</td>
</tr>
<tr>
<td>Hand Tool Cleaning</td>
<td>Rusted</td>
<td>SA 3</td>
<td>-</td>
</tr>
<tr>
<td>Power Tool Cleaning</td>
<td>Rusted</td>
<td>SA 3</td>
<td>-</td>
</tr>
</tbody>
</table>

TINTING

Do not tint.

APPLICATION CONDITIONS

Note: Primer coats used for exterior applications should not be left untopcoated in excess of six months.

Temperature: 40°F minimum, 120°F maximum (air, surface, material):
At least 5°F above dew point

Relative humidity: 85% maximum

PACKAGING

1 gallon cans, 5 gallon pails and 53 gallon drums

APPLICATION METHODS

Brush, conventional spray, and airless spray.

Brush: China bristle
Conventional Spray: 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.

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