PRODUCT DESCRIPTION

MACROPOXY 646 Fast Cure Epoxy is a high solids, high build, fast drying, polyamide epoxy designed to protect steel and concrete in industrial exposures. Ideal for maintenance painting and fabrication shop applications. The high solids content ensures adequate protection of sharp edges, corners, and welds. This product can be applied directly to marginally prepared steel surfaces.

INTENDED USES

- Recommended for marine applications, refineries, offshore platforms, fabrication shops, chemical plants, tank exteriors, power plants, water treatment plants, and mining and minerals industry
- Mill White and Black are acceptable for immersion use for salt water and fresh water, not acceptable for potable water

PRODUCT DATA

<table>
<thead>
<tr>
<th>Surface Preparations</th>
<th>Atmospheric</th>
<th>Immersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stainless Steel</td>
<td>Atmospheric: SSCP-SP16, 1 mil (25 micron) profile</td>
<td></td>
</tr>
<tr>
<td>Aluminum &amp; Galvanizing</td>
<td>SSCP-SP1. If surface has not been weathered for more than 6 months, follow SSCP-SP1 then SSCP-SP16. For fire proofing projects, consult a Sherwin-Williams representative for surface preparation requirements.</td>
<td></td>
</tr>
<tr>
<td>Concrete &amp; Masonry</td>
<td>Atmospheric: SSCP-SP13/NACE 6, or ICRI No. 310.2R CSP 1-3 Immersion: SSCP-SP13/NACE 6-4.3.1</td>
<td></td>
</tr>
<tr>
<td>Ductile Iron Pipe</td>
<td>Atmospheric: NAPF 500-03-03 Power Tool Cleaning Buried &amp; Immersion: NAPF 500-03-04 Abrasive Blast Cleaning Cast Ductile Iron Fittings: NAPF 500-03-05 Abrasive Blast Cleaning</td>
<td></td>
</tr>
</tbody>
</table>

Average Drying Times @ 7.0 mils (175 microns) wet:

- Touch: 4-5 hours, 2 hours, 1.5 hours
- Handle: 48 hours, 8 hours, 4.5 hours
- Recoat: minimum: 48 hours, 1 year, 1 year, maximum: 1 year, 1 year, 1 year
- Cure to service: atmospheric: 10 days, 7 days, 4 days, immersion: 14 days, 7 days, 4 days

Average Drying Times as intermediate @ 5.0 mils (125 microns) wet:

- Touch: 3 hours, 1 hour, 1 hour
- Handle: 48 hours, 4 hours, 2 hours
- Recoat: minimum: 16 hours, 4 hours, 2 hours, maximum: 1 year, 1 year, 1 year

If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity, and film thickness dependent. Paint temperature must be 40°F (4.5°C) minimum.

average Drying Times as intermediate:

- Touch: 3 hours, 1 hour, 1 hour
- Handle: 48 hours, 4 hours, 2 hours
- Recoat: minimum: 16 hours, 4 hours, 2 hours, maximum: 1 year, 1 year, 1 year

Sweat-in-time:

- Pot Life: 30 minutes, 30 minutes, 15 minutes
- Sweat-in-time: 30 minutes, 30 minutes, 15 minutes

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.

Minimum recommended surface preparation:

- Iron & Steel: Atmospheric: SSCP-SP13/NACE 6, or ICRI No. 310.2R CSP 1-3 Immersion: SSCP-SP13/NACE 6-4.3.1
- Stainless Steel: Atmospheric: SSCP-SP16, 1 mil (25 micron) profile
- Aluminum & Galvanizing: SSCP-SP1. If surface has not been weathered for more than 6 months, follow SSCP-SP1 then SSCP-SP16. For fire proofing projects, consult a Sherwin-Williams representative for surface preparation requirements.
- Concrete & Masonry: Atmospheric: SSCP-SP13/NACE 6, or ICRI No. 310.2R CSP 1-3 Immersion: SSCP-SP13/NACE 6-4.3.1
- Ductile Iron Pipe: Atmospheric: NAPF 500-03-03 Power Tool Cleaning Buried & Immersion: NAPF 500-03-04 Abrasive Blast Cleaning Cast Ductile Iron Fittings: NAPF 500-03-05 Abrasive Blast Cleaning
**APPLICATION**

<table>
<thead>
<tr>
<th>Airless Spray*</th>
<th>Conventional Spray*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pump</strong>........</td>
<td><strong>Gun</strong>..................</td>
</tr>
<tr>
<td>Pressure:........</td>
<td>DeVilbiss MBC-510</td>
</tr>
<tr>
<td>..........................</td>
<td>Fluid Tip:..............</td>
</tr>
<tr>
<td>..........................</td>
<td>..........................</td>
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<tr>
<td>..........................</td>
<td>..........................</td>
</tr>
<tr>
<td><strong>Hose</strong>........</td>
<td><strong>Air Nozzle</strong>.........</td>
</tr>
<tr>
<td>..........................</td>
<td>704</td>
</tr>
<tr>
<td><strong>Tip</strong>........</td>
<td><strong>Fluid Tip</strong>.........</td>
</tr>
<tr>
<td>..........................</td>
<td>E</td>
</tr>
<tr>
<td><strong>Reduction</strong></td>
<td><strong>Reducer</strong>...........</td>
</tr>
<tr>
<td>..........................</td>
<td>As needed up to 10% by volume</td>
</tr>
</tbody>
</table>

**Roller***

**Brush***

**Plural Component Spray**. Acceptable

*R⃣duction: As needed up to 10% by volume

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

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### RECOMMENDED SYSTEMS

<table>
<thead>
<tr>
<th>Dry Film Thickness / ct.</th>
<th>Mil</th>
<th>Microns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel &amp; Ductile Iron, Immersion &amp; Atmospheric</td>
<td>5.0-10.0 (125-250)</td>
<td></td>
</tr>
<tr>
<td>2 Cts. Macropoxy 646</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steel, Organic Zinc Primer, Atmospheric</td>
<td>3.0-5.0 (75-125)</td>
<td></td>
</tr>
<tr>
<td>1 Ct. Zinc Clad IV (85)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ct. Macropoxy 646</td>
<td>5.0-10.0 (125-250)</td>
<td></td>
</tr>
<tr>
<td>Steel, Inorganic Zinc Primer, Atmospheric</td>
<td>2.0-4.0 (50-100)</td>
<td></td>
</tr>
<tr>
<td>1 Ct. Zinc Clad II (85)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ct. Macropoxy 646</td>
<td>5.0-10.0 (125-250)</td>
<td></td>
</tr>
<tr>
<td>Steel, Organic Zinc/Epoxy/Urethane Topcoat</td>
<td>3.0-5.0 (75-125)</td>
<td></td>
</tr>
<tr>
<td>1 Ct. Zinc Clad IV (85)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Ct. Macropoxy 646</td>
<td>3.0-10.0 (75-250)</td>
<td></td>
</tr>
<tr>
<td>1 Ct. Acrolon 7300</td>
<td>2.0-4.0 (50-100)</td>
<td></td>
</tr>
<tr>
<td>Steel, Inorganic Zinc/Epoxy/Urethane Topcoat</td>
<td>2.0-4.0 (50-100)</td>
<td></td>
</tr>
<tr>
<td>1 Ct. Zinc Clad II (85)</td>
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<tr>
<td>1 Ct. Macropoxy 646</td>
<td>3.0-10.0 (75-250)</td>
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</tr>
<tr>
<td>1 Ct. Acrolon 7300</td>
<td>2.0-4.0 (50-100)</td>
<td></td>
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<tr>
<td>Steel, Organic Zinc/Epoxy/Polysiloxane Topcoat, Atmospheric</td>
<td>3.0-5.0 (75-125)</td>
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<tr>
<td>1 Ct. Zinc Clad IV (85)</td>
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</tr>
<tr>
<td>1 Ct. Macropoxy 646</td>
<td>3.0-10.0 (75-250)</td>
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<tr>
<td>1-2 Cts. Sher-Loxane 800</td>
<td>2.0-4.0 (50-100)</td>
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<tr>
<td>Concrete/Masonry, Smooth, Immersion &amp; Atmospheric</td>
<td>5.0-10.0 (125-250)</td>
<td></td>
</tr>
<tr>
<td>2 Cts. Macropoxy 646</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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### 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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### HEALTH AND SAFETY

Refer to the SDS 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.

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