HEAT-FLEX® HI-TEMP 500 is formulated with an acrylic silicone resin and can be applied directly to stainless steel or carbon steel with or without primer. It is recommended for continuous operating service temperatures up to 500°F (260°C).

- Does not require heat curing
- Single component
- Recommended for continuous service up to 500°F (260°C)
- User-friendly - can be brushed or rolled
- Excellent spray application properties
- Air dries at ambient
- Can be applied directly to stainless steel

**Product Characteristics**

**Generic type:** Acrylic Silicone  
**Color:** SW4003 Pallet Tan, SW4054 Basin, SW4070 Generator Green, Black, Aluminum, Cirrus Gray, Shale Gray, Thunder Gray, New-Toned White  
**Finish:** Semi-Gloss  
**Volume solids:** 38-41%, depending on color  
26.8% - Aluminum  
**VOC:** 414 g/L; 3.45 lb/gal  
344.4 g/L; 2.79 lb/gal - Aluminum

**Recommended Spreading Rate per coat:**

<table>
<thead>
<tr>
<th>Wet mils (microns)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5 (112.5)</td>
<td>5.5 (137.5)</td>
<td></td>
</tr>
<tr>
<td>2.0 (50)</td>
<td>2.5 (62.5)</td>
<td></td>
</tr>
</tbody>
</table>

- Coverage sq ft/gal (m²/L): 269 (6.6) 336 (8.2)
- Theoretical coverage sq ft/gal (m²/L) @ 1 mil / 25 microns dft: 672 (16.5)

**Drying Schedule @ 50% RH:**

- To touch: 4-6 hours 1-2 hours
- To recoat: 10 hours 8-10 hours
- To ship:* 72 hours 24 hours

* Proper procedures for thin-film systems should be followed when handling and shipping. Avoid any mechanical abrasion.

Drying time is temperature, humidity, and film thickness dependent

**Shelf Life:** 12 months, unopened  
Store indoors at 50°F (10°C) to 100°F (38°C).

**Flash Point:** 80°F (27°C)  
**Reducer:** Not recommended  
**Clean Up:** Xylene, R2K4

Do not exceed maximum recommended DFT. May affect adhesion.
APPLICATION INFORMATION

**SURFACE PREPARATIONS (Cont’d)**

**Iron & Steel**
Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6/NACE 3. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (1.5-2.5 mils / 40-63 microns maximum). If SSPC-SP6/NACE 3 is not possible, Power Tool Cleaning to Bare Metal per SSPC-SP11 is also acceptable (1.0-2.5 mil / 25-63 micron profile maximum). Hand Tool Cleaning per SSPC SP 2 or Power Tool Cleaning per SSPC SP 3 are acceptable preparation methods when SSPC SP 6 or SSPC SP 11 are not possible. Coat any bare steel the same day as it is cleaned or before flash rusting occurs. On stainless steel, clean per SSPC-SP1. Aluminum Oxide grit is also acceptable for use. Do not use chlorinated solvents for cleaning stainless steel. Product performance is relative to the surface preparation achieved.

**APPLICATION EQUIPMENT (Cont’d)**

**Brush**
Brush: Natural bristle
Reduction: Not recommended

**Roller**
Cover: 1/4"-3/8" woven with solvent resistant core
Reduction: Not recommended

If specific application equipment is not listed, equivalent equipment may be substituted. For brush and roller application, maintain a wet edge while avoiding runs or excess film build.

**Surface Preparation Standards**

<table>
<thead>
<tr>
<th>Condition of Surface</th>
<th>ISO 8501-1</th>
<th>Swedish Std.</th>
<th>SSPC</th>
<th>NACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>White Metal</td>
<td>Sa 3</td>
<td>Sa 3</td>
<td>SP 5</td>
<td>4</td>
</tr>
<tr>
<td>Near White Metal</td>
<td>Sa 2.5</td>
<td>Sa 2.5</td>
<td>SP 10</td>
<td>3</td>
</tr>
<tr>
<td>Commercial Blast</td>
<td>Sa 2</td>
<td>Sa 2</td>
<td>SP 6</td>
<td>3</td>
</tr>
<tr>
<td>Brush-Off Blast</td>
<td>Sa 1</td>
<td>Sa 1</td>
<td>SP 7</td>
<td>4</td>
</tr>
<tr>
<td>Hand Tool Cleaning</td>
<td>Rusted</td>
<td>Rusted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pitted &amp; Rusted</td>
<td>C St 2</td>
<td>C St 2</td>
<td>SP 2</td>
<td></td>
</tr>
<tr>
<td>Power Tool Cleaning</td>
<td>Rusted</td>
<td>Rusted</td>
<td></td>
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<tr>
<td></td>
<td>C St 3</td>
<td>C St 3</td>
<td>SP 3</td>
<td></td>
</tr>
</tbody>
</table>

**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.

Conventional spray is the recommended method of application. Do not apply in heavier films than specified as blistering may occur.

**Conventional Spray:**
- Gun: Graco 700N
- Fluid Nozzle: 0.045" - 0.055"
- Air Nozzle: 20 cfm
- Atomizing Pressure: 50 psi
- Fluid Pressure: 20-30 psi

**Airless Spray:**
- Pressure: Minimum 2000 psi
- Hose: 3/8" ID
- Tip: 0.013" - 0.017"
- Reduction: Not recommended

**Application Procedures**

Surface preparation must be completed as indicated.

Mixing Instructions: Mix paint thoroughly with low speed, sparkproof, power agitation before use. Obtain a uniform consistency. Do not incorporate air.

**Clean Up**
Clean spills and spatters immediately with Xylene, R2K4. Clean tools immediately after use with Xylene, R2K4. 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**

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