METALHIDE® ONE PAC | 97-676

DESCRIPTION
One-component, inorganic zinc silicate primer

PRINCIPAL CHARACTERISTICS
• Provides outstanding corrosion resistance
• Can be used where most 2-pack inorganic zinzs are used
• Single component that can be partly used then resealed for future use
• Excellent for use in coastal, marine, or off-shore environments
• Resistant to dry temperature up to 750°F(399°C)

COLOR AND GLOSS LEVEL
• Gray, green
• Flat

BASIC DATA AT 68°F (20°C)

<table>
<thead>
<tr>
<th>Data for product</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of components</td>
<td>One</td>
</tr>
<tr>
<td>Volume solids</td>
<td>52 ± 3%</td>
</tr>
<tr>
<td>VOC (Supplied)</td>
<td>EPA Method 24: 3.8 lb/US gal (458.9 g/l)</td>
</tr>
<tr>
<td>Recommended dry film thickness</td>
<td>3.0 - 4.0 mils (75 - 100 µm) depending on system</td>
</tr>
<tr>
<td>Theoretical spreading rate</td>
<td>278 ft²/US gal for 3.0 mils (6.9 m²/l for 75 µm)</td>
</tr>
<tr>
<td>Shelf life</td>
<td>At least 15 months when stored cool and dry</td>
</tr>
</tbody>
</table>

Notes:
- See ADDITIONAL DATA – Overcoating intervals
- See ADDITIONAL DATA – Curing time

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES
• Coating performance is, in general, proportional to the degree of surface preparation

Steel
• Abrasive blast with an angular abrasive to an SSPC SP-6 cleanliness or higher for optimum performance. Achieve a surface profile of 1.0 – 3.0 mils (25 – 75 µm)
• Higher surface profiles up to 5 mils (125 µm) are acceptable, but the product must be applied in a thickness great enough to achieve a minimum of 2.5 mils (65 µm) dry film thickness
• Apply this product as soon as possible to prevent blasted surface from rusting.
• Keep moisture, oil, grease, or other organic matter off surface before coating
• For touch up and repair, power tool cleaning in accordance with SSPC SP-11 is acceptable
Substrate temperature and application conditions

- Surface temperature during application should be between 20°F (-7°C) and 140°F (60°C)
- Surface temperature during application should be at least 5°F (3°C) above dew point
- Ambient temperature during application and curing should be between 20°F (-7°C) and 120°F (49°C)
- Relative humidity during application should be between 30% and 85%

Note: Work area can be artificially humidified by atomized water spray and/or ponding water under the coated structures. After the film is dry-to-touch, a fine mist may be applied over the coating to expedite curing in low humidity environments

**Warning**

Removal of old paint by sanding, scraping or other means may generate dust or fumes which contain lead. EXPOSURE TO LEAD DUST OR FUMES MAY CAUSE ADVERSE HEALTH EFFECTS, ESPECIALLY IN CHILDREN OR PREGNANT WOMEN. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted and approved (e.g., NIOSHapproved) respirator and proper containment and cleanup. For additional information, contact the USEPA/Lead Information Hotline at 1-800-424-LEAD or the regional Health Canada office

**SYSTEM SPECIFICATION**

- Primers: Direct to metal
- Topcoats: PITTGUARD epoxies, AMERCOAT epoxies, AMERLOCK Series, SIGMACOVER epoxies

**INSTRUCTIONS FOR USE**

- Mix with a pneumatic air mixing at moderate speeds to homogenize the container
- Move the impeller up and down to ensure good off-bottom mixing and draw-down from the top surface

**Pot life**

24 hours at 70°F (21°C)

Note: See ADDITIONAL DATA – Pot life
Application
- Area should be sheltered from airborne particulates and pollutants
- Ensure good ventilation during application and curing
- Provide shelter to prevent wind from affecting spray patterns
- Mist spray: A mist coat / full coat application technique is required when topcoating to prevent application bubbling. Ensure dry spray is removed from the surface
- Repair: When dry though, measure the dry film thickness. If film thickness is lower than specified, additional material can be applied up 24 hours from the previous application. Thin the second coat with 97-733 thinner. Ensure any dry spray is removed
- Repair: For aged inorganic zinc coatings, spot blast rusted areas in accordance with the surface preparation instructions before touching up. When blasting is not practical, AQUAPON 97-670, AMERCOAT 68 HS or DIMETCOTE 302 H may be used for repair

Material temperature
Material temperature during application should be between 40°F (4°C) and 90°F (32°C)

Air spray
- Separate air and fluid pressure regulators and a moisture and oil trap in the main air supply line are recommended.
- An agitated pressure pot is recommended
- Limit fluid hose length to 50 feet
- Use standard conventional equipment

Recommended thinner
THINNER 40-26 (97-731), THINNER 60-30 (97-733)

Volume of thinner
0 - 8%

Nozzle orifice
Approx. 0.070 in (1.8 mm)

Airless spray
- 30:1 pump or larger
- A reversible fluid tip recommended

Recommended thinner
THINNER 40-26 (97-731), THINNER 60-30 (97-733)

Volume of thinner
0 - 5%

Nozzle orifice
0.019 – 0.023 in (approx. 0.48 – 0.58 mm)
**Brush/roller**
- Use a high quality natural bristle brush. Ensure brush is well loaded to avoid air entrainment. Brush application is limited to small touch up areas of a few square inches
- Roller application is not recommended

**Recommended thinner**
THINNER 40-26 (97-731), THINNER 60-30 (97-733)

**Volume of thinner**
0 – 5%

**Cleaning solvent**
THINNER 21-06 (97-727)

**ADDITIONAL DATA**

**Overcoating interval for DFT up to 3.0 mils (75 µm)**

<table>
<thead>
<tr>
<th>Overcoating with...</th>
<th>Interval</th>
<th>40°F (4°C)</th>
<th>50°F (10°C)</th>
<th>70°F (21°C)</th>
<th>90°F (32°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Itself and recommended topcoats</td>
<td>Minimum</td>
<td>48 hours</td>
<td>36 hours</td>
<td>20 hours</td>
<td>16 hours</td>
</tr>
<tr>
<td></td>
<td>Maximum</td>
<td>Unlimited</td>
<td>Unlimited</td>
<td>Unlimited</td>
<td>Unlimited</td>
</tr>
</tbody>
</table>

Notes:
- Overcoating times valid for a relative humidity of 50%
- To confirm cure to topcoat, conduct a MEK rub test per ASTM D4752. A rating of 4 or higher is sufficient for topcoating
- Surface must be power washed as needed to remove all surface contaminants including zinc salts. Surface must be clean and dry

**Curing time for DFT up to 3.0 mils (75 µm)**

<table>
<thead>
<tr>
<th>Substrate temperature</th>
<th>Dry to touch</th>
<th>Dry to handle</th>
</tr>
</thead>
<tbody>
<tr>
<td>40°F (4°C)</td>
<td>3 hours</td>
<td>12 hours</td>
</tr>
<tr>
<td>50°F (10°C)</td>
<td>2 hours</td>
<td>8 hours</td>
</tr>
<tr>
<td>70°F (21°C)</td>
<td>1 hour</td>
<td>4 hours</td>
</tr>
<tr>
<td>90°F (32°C)</td>
<td>40 minutes</td>
<td>2.5 hours</td>
</tr>
</tbody>
</table>

Note: Curing times valid for a relative humidity of 50%

**Pot life (at application viscosity)**

<table>
<thead>
<tr>
<th>Mixed product temperature</th>
<th>Pot life</th>
</tr>
</thead>
<tbody>
<tr>
<td>70°F (21°C)</td>
<td>24 hours</td>
</tr>
<tr>
<td>90°F (32°C)</td>
<td>8 hours</td>
</tr>
</tbody>
</table>
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Product Qualifications

- SSPC Paint 20, Type IC, Level 1
- MPI Category #19, Inorganic zinc rich primer

DISCLAIMER

- For industrial or professional use only

SAFETY PRECAUTIONS

- For paint and recommended thinners see INFORMATION SHEETS 1430, 1431 and relevant Material Safety Data Sheets
- This is a solvent-borne paint and care should be taken to avoid inhalation of spray mist or vapor, as well as contact between the wet paint and exposed skin or eyes

Danger

Rags, steel wool or waste soaked with this product may spontaneously catch fire if improperly discarded. Immediately after use, place rags, steel wool or waste in a sealed water-filled metal container. Refer to www.pittsburghpaints.com, Spontaneous Combustion Advisory for additional information

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective and Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.

REFERENCES

- CONVERSION TABLES
- EXPLANATION TO PRODUCT DATA SHEETS
- SAFETY INDICATIONS
- SAFETY IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD – TOXIC HAZARD

WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG’s specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer’s discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer’s failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.
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AVAILABILITY

Packaging
1-gallon and 5-gallon kits

<table>
<thead>
<tr>
<th>Product codes</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>97-676</td>
<td>Gray</td>
</tr>
<tr>
<td>97-677</td>
<td>Green</td>
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