Flame Control TemperKote® Universal Primer

INDUSTRIAL HI-HEAT® CORROSION RESISTANT

*Maximum Service Temperature 1200°F (649°C)

**FEATURES:**

- Can be handled and shipped in ‘air dry’ state
- Bonds to ambient steel
- Bonds to galvanized steel
- Excellent bond to stainless Steel, without the need to abrasive blast.

**SURFACE PREPARATION:**

For best results surfaces should be free from oil, grease, dirt, mill scale, rust, corrosion products, oxides, paint and foreign matter.

**STEEL:**

Remove all flux, splatter and slag left from welding. Grind all welds until smooth. Remove rust, mill scale, oil, grease, and other contamination by solvent cleaning per SSPC-SP1.

For severe environments blast surface to commercial grade profile per SSPC-SP6.

For typical industrial environments a low profile white metal blast, SSPC-SP5, is preferred as it will give best results, especially where higher service temperatures are anticipated. Remove all remaining abrasive from surface by air blasting. Coat the freshly blasted surface as soon as possible. Do not allow surface to become wet. Do not wash freshly blasted surface with solvents.

**NEW GALVANIZED SURFACES:**

Remove all oil, grease and flux by solvent cleaning per SSPC-SP1.

**WEATHERED GALVANIZED SURFACES:**

Remove all dirt, oil and grease by solvent cleaning per SSPC-SP1. Remove rust or foreign deposits by wire brushing per SSPC-SP2 or power tool cleaning per SSPC-SP3.

**STAINLESS STEEL SURFACES:**

Surface must be clean and dry. Remove all oil, grease, soil, drawing and cutting compounds and other foreign matter by solvent cleaning per SSPC-SP1.

**DO NOT USE CHLORINATED SOLVENTS ON STAINLESS STEEL SURFACES:**

For large areas steam clean with an alkaline detergent followed by a steam or fresh water wash to remove residue. Uniform film is generally obtained.

**DESCRIPTION:**

Flame Control TemperKote Universal Industrial Hi-Heat Corrosion Resistant Primer is a VOC compliant primer designed to impart corrosion resistance in severe environments. The primer withstands severe thermal cyclic conditions to 1200°F. It is specially formulated to form a tenacious protective bond to a variety of metals, providing maximum corrosion protection under TemperKote 600, 600HS, and 1000 color stable topcoats. TemperKote Universal Corrosion Resistant Primer air dries within 30 minutes and can ship in the air dried state in 24 hours. The primer cures through the use of a heat activated catalyst so no complex post heat curing is necessary. TemperKote Universal Corrosion Resistant Primer in the air dried state will reach full cure when the coated equipment is placed in service. TemperKote™ Universal Corrosion Resistant Primer is designed to be topcoated with TemperKote 600, 600HS, or 1000 within 4-6 hours.

**RECOMMENDED USES:**

Wherever maximum resistance to heat, humidity, and weather is required. Can be used as a primer under TemperKote 600, 600HS, or 1000 on heaters, stacks, boilers, breeches, mufflers, radiators, storage tanks, pipelines, steam lines, etc., where operating temperature will not exceed 1200°F (649°C). Not recommended for use on the inside of ovens, stacks, etc.

**FEATURES:**

- VOC Compliant, high solids formulation
- Excellent resistance to corrosion, weathering and heat.
- Outstanding resistance to thermal shock.
- Open recoat window

<table>
<thead>
<tr>
<th>CHARACTERISTICS:</th>
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<tbody>
<tr>
<td>Color ............. Gray and Red Oxide</td>
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<tr>
<td>Thermal Stability ... 1200°F (649°C)</td>
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<tr>
<td>Finish ................. Flat</td>
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<tr>
<td>Resin Type ............. Silicone</td>
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<tr>
<td>Type of Cure ....... Resin cross-linking</td>
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<tr>
<td>Drying Time @ 77°F (25°C) &amp; 50% R.H. .................</td>
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<tr>
<td>To touch ............. ½ - 1 hour</td>
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<tr>
<td>To topcoat ........... 4-6 hours</td>
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<td>Minimum, no maximum</td>
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<tr>
<td>Application Temperature ....... 50°F (10°C) to 300°F (149°C)</td>
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<tr>
<td>Spreading Rate per Coat ............ 320 sq. ft./gal (7.8 m²/L)</td>
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<tr>
<td>............................... 5.0 mils wet, 2.0 mils dry</td>
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<tr>
<td>VOC Less Than .... 3.5 lbs./gal (420 g/L)</td>
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<tr>
<td>Solids by Weight ........ 65% ± 2%</td>
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<tr>
<td>Solids by Volume ....... 40% ± 2%</td>
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<tr>
<td>Weight Per Gallon .... 14.3 lb (6.5 kg)</td>
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<tr>
<td>Flash Point of Liquid Coating .... 40°F (4.4°C) (Pensky-Martens closed cup)</td>
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<tr>
<td>Reducer/Cleaner ...... Reducer 1000</td>
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<tr>
<td>Shelf Life .......... 12 months (unopened)</td>
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<tr>
<td>Packaging ........ 1, 5 &amp; 55 gal. containers</td>
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<tr>
<td>Application ........ Brush, conventional and airless spray</td>
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APPLICATION:

Mix thoroughly by boxing or stirring. Can be applied by brush or spray. Spray application is desired, as a more uniform film is generally obtained. Do not apply heavier film than specified, as the coating may blister when heat is applied.

Apply one coat of Flame Control TemperKote Universal Corrosion Resistant Primer at approximately 5 mils wet film thickness, (320 sq. ft. /gal.) to yield a dry film thickness of 2.0 mils. Allow to cure 4-6 hours at ambient temperatures. Apply one coat of TemperKote 600, 600HS, or 1000 Series Hi-Heat Coating at the specified coverage rate.

APPLICATION EQUIPMENT:

Airless Spray
Fluid pressure ............ 2500 psi
Strainer. ................. 100 Mesh
Fluid hose ............. ¼” diameter
Tip ....................... .015 - .020

PRECAUTIONS:

DANGER! FLAMMABLE LIQUID & VAPOR: CONTAINS TOLUENE & PETROLEUM DISTILLATES.

VAPOR HARMFUL. MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. CAUSES EYE, SKIN, NOSE AND THROAT IRRITATION. NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Keep away from heat, sparks and flame. VAPORS MAY CAUSE FLASH FIRE. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone.

Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation.

USE ONLY WITH ADEQUATE VENTILATION. Do not breathe vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application. Follow respirator manufacturer’s directions for respirator use. Close container after each use. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

FIRST AID: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately. In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get medical attention; for skin, wash thoroughly with soap and water. If swallowed, get medical attention immediately. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent container and unused contents in accordance with local, state and federal regulations.

FOR INDUSTRIAL USE ONLY

Read MSDS before opening containers.

KEEP OUT OF THE REACH OF CHILDREN

As we cannot anticipate all conditions under which this information and our products, or the products of other manufacturers in combination with our products, may be used, we accept no responsibility for results obtained by the application of this information or the safety or suitability of our products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product or product combination for their own purposes. We sell the products without warranty or guarantee, and buyers and users assume all responsibility and liability for loss or damage from the handling and use of our products, whether used alone or in combination with other products.

08/08