



**TemperKote® Zinc Primer**  
 INDUSTRIAL HI-HEAT® RESISTANT COATING  
 Air Dries, No Heat Cure Required  
 \*Maximum Service Temperature 1000°F (538°C)

**Product Description:**

TemperKote Industrial Hi-Heat Corrosion Resistant Zinc Primer is a VOC compliant, two component primer designed to impart corrosion resistance in severe environments. The primer withstands severe thermal cyclic conditions to 1000°F. It is specially formulated to form a tenacious protective bond to steel, providing maximum corrosion protection under TemperKote 600 and 1000 color stable topcoats. TemperKote Zinc Primer air dries within 30 minutes and can ship in the air dried state in 24 hours. TemperKote 1000 Zinc Primer will air dry and reach full cure when the coated equipment is placed in service. TemperKote Zinc Primer is designed to be topcoated with TemperKote 600 or 1000 within 4-6 hours.

**Characteristics:**

<b>Colors</b>	Gray	<b>Weight Per Gallon</b>	14.4 lbs. (6.5 kg)
<b>Finish</b>	Flat	<b>Resin Type</b>	Silicone
<b>Thermal Stability</b>	1000°F (538°C)	<b>VOC</b>	Less Than 3.5 lbs. /gal (420 g/L)
<b>Type of Cure</b>	Resin cross-linking	<b>Flash Point</b>	40°F (4.4°C) (PMCC)
<b>Application Temperature</b>	50°F (10°C) to 120°F (49°C)	<b>Reducer/Cleaner</b>	TemperKote Reducer
<b>Solids By Volume</b>	42% ± 2%	<b>Packaging</b>	1, 5 & 55 gal. containers
<b>Solids By Weight</b>	68% ± 2%	<b>Shelf Life</b>	1 year (unopened)
<b>Spreading Rate per Coat</b>	225 – 333 sq. ft./gal (5.5 – 8.2 m <sup>2</sup> /L)		
	4.8 – 7.1 mils wet, 2.0 – 3.0 mils dry		
<b>Drying Time @ 77°F (25°C) &amp; 50% R.H.</b>		<b>To touch</b>	<b>To Topcoat</b>
		½ - 1 hour	4 – 6 hours minimum

**Recommended Uses:**

Wherever maximum resistance to heat, humidity, and weather is required. Can be used as a primer under TemperKote 600 or 1000 on heaters, stacks, boilers, breeches, mufflers, radiators, storage tanks, pipelines, steam lines, etc., where operating temperature will not exceed 1000°F (538°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
- Can be handled and shipped in 'air dry' state
- Bonds to ambient steel

**Test Data:**

Test Type	Reference	Specification Details	Typical Result
Salt Fog	ASTM B117	168 hrs	ASTM D 714 – 10 ASTM D 1654 – 10 ASTM D 610 – 10
Adhesion	ASTM D 3359		5B
Impact, Direct/Reverse, inch/lbs	ASTM D 2794		160/160
Flexibility, Mandrel	ASTM D 522		1/8" Pass
Pencil Hardness	ASTM D 3363		2H



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**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- SP5.

For Typical Industrial Environments a low profile near-white metal blast, SSPC-SP10, is preferred as it will give best results, especially where higher service temperatures are anticipated. Blast profile should be 1.0 - 1.5 mils. 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.

**MIXING:**

TemperKote Zinc Primer is a two component system composed of a resin base component and a Zinc dust component. To mix, slowly add the zinc dust into the resin base while mixing using mechanical agitation. Mix material until uniform in consistency.

**Application:**

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 TemperKote Zinc Primer at approximately 4.8 – 7.1 mils wet film thickness, (225 - 333 sq.ft./gal.) to yield a dry film thickness of 2.0-3.0 mils dry. Allow to cure 4-6 hours at ambient temperatures. Apply one coat of TemperKote 600 or 1000 Series Hi-Heat Coating at the specified coverage rate.

**Application Equipment:**

**AIRLESS SPRAY:**

**Titan 740 Impact (or Equivalent)**

Fluid pressure . . . . . 2400 - 2800 psi  
Manifold Filter . . . . . None  
Gun Filter . . . . . 30 Mesh or Remove  
Hose . . . . . ¼" diameter  
Gun . . . . . LX-8011  
Tip . . . . . .015 - .021

**FOR INDUSTRIAL USE ONLY**

**Read MSDS before opening containers**

**KEEP OUT OF THE REACH OF CHILDREN**

**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.

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