Flame Control TemperKote® 1000HS Primer
HOT SURFACE TOLERANT

INDUSTRIAL HI-HEAT® RESISTANT COATING
*Maximum Service Temperature 1200°F (649°C)
* Maximum Surface Temperature for Application 500°F (260°C)

Product Description:

Flame Control TemperKote 1000HS 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 1000HS color stable topcoats. TemperKote 1000HS Corrosion Resistant Primer has the additional benefit of being formulated for application to Hot Surfaces. The primer can be applied to metal exhibiting temperatures from 250°F (121°C) to 500°F (260°C). This unique feature allows for the coating of hot equipment without complete shutdown resulting in a fast turnaround time to resume normal operating temperatures. TemperKote 1000HS Corrosion Resistant Primer is designed to be topcoated with TemperKote 1000HS in as little as 1 hour when coating hot surfaces. It should be noted that when applied at ambient temperatures the coating will remain in a tacky state until a minimum temperature of 250°F (121°C) is reached.

Characteristics:

Colors	Gray and Red Oxide	**Solids By Weight**	66% ± 2%
Finish	Flat	**Weight Per Gallon**	13.8 lbs. (6.5 kg)
Thermal Stability	1200°F (649°C)	**VOC**	Less Than 3.5 lbs. /gal (420 g/L)
Type of Cure	Resin cross-linking	**Flash Point**	40°F (4.4°C) (PMCC)
Application Temperature	250°F (121°C) to 500°F (260°C)	**Reducer/Cleaner**	TemperKote Reducer HS
Resin Type	Silicone	**Packaging**	1, 5 & 55 gal. containers
Solids By Volume	45% ± 2%	**Shelf Life**	1 year (unopened)
Spreading Rate per Coat	240 – 364 sq.ft./gal (5.9 – 8.9 m^2/L) 4.4 – 6.7 mils wet, 2.0 – 3.0 mils dry		

Drying Time @ 250°F (121°C) & 50% R.H.	**To touch**	**To Topcoat**
(*) Higher surface temperatures will speed dry times	15 – 30 minutes	1 hour minimum
CuringTemperature and Time	**Minimum Curing Temperature**	**Minimum Curing Time**
	250°F (121°C)	1 hour

Recommended Uses:

Wherever maximum resistance to heat, humidity, and weather is required, combined with the need to coat equipment that is still in-service. Can be used as a primer under TemperKote 1000HS 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:

- Direct application to hot steel exhibiting temperatures from 250°F (121°C) to 500°F (260°C)
- VOC Compliant, high solids formulation
- Excellent resistance to corrosion, weathering and heat.
- Outstanding resistance to thermal shock.
- Open recoat window
- Bonds to ambient steel.
- Bonds to galvanized steel
- Excellent bond to stainless Steel, without the need to abrasive blast.

Test Data:

Test Type	Reference	Specification Details	Typical Result
Salt Fog	**ASTM B117**	**168 hrs**	**ASTM D714 – 10 ASTM D1654 – 10 ASTM D610 – 10**
Adhesion	**ASTM D 3359**		**5B**
Impact, Direct/Reverse, inch/lbs	**ASTM D 2794**		**160/160**
Flexibility, Mandrel	**ASTM D522**		**1/8" Pass**
Pencil Hardness	**ASTM D 3363**		**2H**

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Surface Preparation:

General:
For best results surfaces should be free from oil, grease, dirt, mill scale, rust, corrosion products, oxides, paint and foreign matter. All surfaces should be solvent cleaned per SSPC-SP1 and meet SSPC-SP3 minimums with surface profile of 1.0 - 1.5 mils.

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 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. For small difficult to reach areas, SSPC-SP11 power tool cleaning to bare metal is acceptable.

For Severe Environments blast surface to commercial blast profile per SSPC- SP6.

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.

Application:

Mix thoroughly by boxing or stirring. Spray application is required. **Do not apply heavier film than specified, as the coating may blister when heat is applied.**

HOT STEEL:
IMPORTANT! It is critical to make multiple quick passes to achieve proper coverage rates. These thin passes will allow the solvent to evaporate at a controlled rate insuring no pinholes.

WARNING: Use only Reducer HS for thinning of any TemperKote HS series coatings. The use of any other solvent could create a fire hazard and would likely result in poor film characteristics and 'dry spray'.

Apply one coat of Flame Control TemperKote 1000HS Corrosion Resistant Primer at approximately 4.4 – 6.7 mils wet film thickness, (240 - 364 sq. ft. /gal.) to yield a dry film thickness of 2.0 – 3.0 mils. After primer is dry, apply one coat of TemperKote 1000HS Series Hi-Heat Coating at the specified coverage rate.

NOTE: Application to hot surfaces increases the possibility of dry spray, maintain a reasonable distance from the surface being coated, avoid reaching and angles greater than 30 degrees.

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.

Revised 01/10