



TemperKote® 600
 INDUSTRIAL HI-HEAT® RESISTANT COATING
 Air Dries for Purposes of Handling
 *Maximum Service Temperature 600°F (315°C)

Product Description:

TemperKote 600 Industrial Hi-Heat Coatings are based on a thermally stable silicone modified acrylic resins & specialized pigments to achieve maximum heat resistant properties. The drying mechanism utilizes a combination of solvent evaporation & resin cross-linking to allow handling and shipping in the air dried state in 24 hours.

Characteristics:

Colors	Black, Silver, White, Off White, Dark Gray, Medium Gray, Light Gray, Blue, Beige, Light Beige, Dark Green, Light Green, Safety Blue, Safety Green, Safety Yellow, Safety Orange, Safety Red & Custom Colors		
Finish	All colors Flat, except Silver is a Semi Gloss	Resin Type	Silicone Acrylic
Thermal Stability	600°F (315°C)	VOC	Less Than 3.5 lbs. /gal (420 g/L)
Color Stability	500°F (260°C)	Flash Point	40°F (4.4°C) (PMCC)
Type of Dry	Solvent Evaporation/Resin cross-linking	Reducer/Cleaner	TemperKote Reducer
Curing Schedule	Air Dry	Packaging	1, 5 & 55 gal. containers
Application Temperature	50°F (10°C) to 120°F (49°C)	Shelf Life	2 year (unopened)
Application Humidity	Maximum 85% RH Temperature must be at least 5°F above the dew point	Storage Temperature	40°F - 100°F
Solids By Volume	Silver 25% ± 2% All Other Colors 31% ± 2%	Solids By Weight	Silver 37% ± 2% All Other Colors 50% ± 2%
Weight Per Gallon	Silver 8.6 lbs. (3.9 kg)	All Other Colors	12.65 lbs. (5.7 kg)
Spreading Rate per Coat	Primer	114 – 138 sq. ft./gal (2.8 – 3.4 m ² /L) 12 – 14 mils wet, 5 – 6 mils dry	
	Silver	160 – 267 sq. ft./gal (3.9 – 6.5 m ² /L) 6.0 – 10.0 mils wet, 1.5 – 2.5 mils dry	
	All Other Colors	198 – 333 sq. ft./gal (4.9 – 8.1 m ² /L) 4.8 – 8.1 mils wet, 1.5 – 2.5 mils dry	
Drying Time @ 77°F (25°C) & 50% R.H.	To touch	3/4 - 1 hour	
	To Ship	24 hours	

Recommended Uses:

Wherever maximum resistance to heat, humidity, and weather is required. Can be used on heaters, stacks, boilers, breeches, mufflers, radiators, storage tanks, pipelines, steam lines, etc., where operating temperature will not exceed 600°F (315°C). **Not recommended** for use on the **inside** of ovens, stacks, etc.

Performance Information:

This very unique coating performs as well as many pure silicone resins, but has the distinct advantage of drying at room or ambient temperature. It can be used over the Flame Control TemperKote 600 Primer for service temperatures up to 500°F (260°C), or applied directly to clean steel for service up to 600°F (315°C). It has excellent color stability to 600°F (315°C) in Black and Silver & up to 500°F (260°C) for all other colors in addition to exceptional heat resistant properties & weathering characteristics.

Test Data:

Test Type	Reference	Specification Details	Typical Result
Salt Fog	ASTM B117	168 hrs	ASTM D714 – 10 ASTM D1654 – 8 ASTM D610 – 9-G
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 D3363		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 a white metal blast profile per SSPC- SP5.

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 steam or fresh water wash to remove residue.

Application:

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

STEEL:

Where maximum corrosion resistance is desired, apply one coat of Flame Control TemperKote 600 Primer at approximately 5.0 – 8.3 mils wet film thickness, (193 – 321 sq.ft./gal) for service temperatures up to 500°F (260°C). After primer is dry, apply one coat of TemperKote 600 Series Hi-Heat coating at specified coverage rate (refer to characteristics section).

AGED MASONRY:

No priming required. Apply one uniform coat at the specified wet film thickness (refer to characteristics section).

Application Equipment:

AIRLESS SPRAY:

Titan 740 Impact (or Equivalent)

- Fluid pressure 2700 - 3100 psi
- Manifold Filter 60 Mesh
- Gun Filter 60 Mesh
- Hose ¼" diameter
- Gun LX-8011
- Tip015 - .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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