



Product Description:

TemperKote 1000 Industrial Hi-Heat Coatings are based on 100% silicone resin. The coating air dries within 30 minutes and can ship after 24 hours. Special pigments are utilized to achieve maximum heat resistant properties and color stability.

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 | | |
| Finish | Flat | Resin Type | Silicone |
| Thermal Stability | 1200°F (649°C) | VOC | Less Than 3.5 lbs. /gal (420 g/L) |
| Color Stability | 1000°F (538°C) | Flash Point | 40°F (4.4°C) (PMCC) |
| Type of Cure | Resin cross-linking | Reducer/Cleaner | TemperKote Reducer |
| Application Temperature | 50°F (10°C) to 120°F (49°C) | Packaging | 1, 5 & 55 gal. containers |
| Application Humidity | Maximum 85% RH Temperature must be at least 5°F above the dew point | Shelf Life | 2 year (unopened) |
| Solids By Volume | Primer 47% ± 2% Silver 25% ± 2% All Other Colors 44% ± 2% | Storage Temperature | 40°F - 100°F |
| Weight Per Gallon | Primer 15.9 lbs. (6.5 kg) Silver 9.8 lbs. (4.5 kg) All Other Colors 13.0 lbs. (5.9 kg) | Solids By Weight | Primer 71% ± 2% Silver 40% ± 2% All Other Colors 65% ± 2% |
| Spreading Rate per Coat | Primer | 126 – 151 sq. ft./gal (3.1 – 3.7 m ² /L) 10.0 – 12.0 mils wet, 5.0 – 6.0 mils dry | |
| | Silver | 160 – 267 sq. ft./gal (3.9 – 6.5 m ² /L) 6.0 – 10.0 mils wet, 2.0 – 3.0 mils dry | |
| | All Other Colors | 282 – 470 sq. ft./gal (6.9 – 11.5 m ² /L) 3.4 – 5.7 mils wet, 1.5 – 2.5 mils dry | |
| Drying Time @ 77°F (25°C) & 50% R.H. | | TemperKote 1000 | TemperKote 1000 Primer |
| | To touch | ½ - 1 ½ hour | ½ – 1 hour |
| | To recoat | | 4 – 6 hours |
| | 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 1000°F (649°C). **Not recommended** for use on the **inside** of ovens, stacks, etc.

Performance Information:

This 100% silicone based coating, is able to withstand severe thermal cycling to 1000°F and can be used over TemperKote 1000 Primer, or applied directly to clean steel. It has the unique ability to be handled in the air dry state. It has exceptional color stability to 1000°F (538°C), Black and Silver to 1200°F (649°C), excellent heat resistant properties, excellent weathering characteristics and good corrosion protection.

Test Data:

| Test Type | Reference | Specification Details | Typical Result |
|----------------------------------|-------------|-----------------------|---|
| Salt Fog | ASTM B117 | 168 hrs | ASTM D714 – 8 ASTM D1654 – 10 ASTM D610 – 6-P |
| Adhesion | ASTM D 3359 | | 5B |
| Impact, Direct/Reverse, inch/lbs | ASTM D 2794 | | 80/80 |
| Flexibility, Mandrel | ASTM D522 | | 1/4" Pass |
| Pencil Hardness | ASTM D3363 | | 2H |



TemperKote® 1000
INDUSTRIAL HI-HEAT® RESISTANT COATING
*Maximum Service Temperature 1000°F (649°C)

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- 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 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.**

STEEL:

Where maximum corrosion resistance is desired, apply one coat of Flame Control TemperKote 1000 Primer at approximately 10.0 – 12.0 mils wet film thickness, (126 - 151 sq. ft. /gal.). After primer is dry, apply one coat of TemperKote 1000 Series Hi-Heat Coating at the specified coverage rate (refer to characteristics section).

Where maximum corrosion resistance is not required, one coat of the TemperKote 1000 Series Hi-Heat Coating can be applied directly to the metal at 1.5 – 2.5 mils dry film thickness per coat (282 - 470 sq. ft. /gal. -all colors and 160 - 267 sq.ft./gal-silver).

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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