

**DESCRIPTION:**

TemperKote 1400H Industrial Hi-Heat Coatings are based on 100% silicone resin with special ceramic colorants and additives. The coating air dries within 30 minutes and can ship in the 'air dry' state in 24 hours. Avoid mechanical abrasion when in air dry state. For optimum hardness a heat cure of 350°F for one hour is needed, however no complex post heat curing is necessary. TemperKote 1400H in the air dried state will cure when the coated equipment is placed in service. Special pigments are utilized to achieve maximum heat resistant properties and color stability.

**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 1400°F (760°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 1400°F and can be applied directly to clean steel. It has the unique ability to be handled in the air dry state. It has good color stability to 1000°F (538°C); Black to 1400°F (649°C), excellent heat resistant properties, excellent weathering characteristics and good corrosion protection.

**CHARACTERISTICS:**

**Colors** . . . . . Black (Fed. Std. 37030), Dark Gray, Green (Fed. Std. 34094) and Tan (Fed. Std. 33446)

**Color Stability\*** . . . . . 1000°F (538°C)

**Thermal Stability** . . . . . 1400°F (760°C)

**Finish** . . . . . Flat

**Resin Type** . . . . . Silicone

**Type of Cure** . . . . . Resin cross-linking, fusion of ceramics and by metal complexing

**Drying Time @ 77°F (25°C) & 50% R.H.** . . . . .  
**TemperKote 1400H**  
 To touch. . . . . ½ - 1 ½ hours  
 To handle . . . . . 24 hours

**Curing Temperature & Time**  
 Minimum curing temperature. . . . . 350°F (177°C)  
 Minimum curing time. . . . . 1 hour

**Application Temperature** . . . . .  
 . . . . . 50°F (10°C) to 120°F (49°C)

**Spreading Rate per Coat**  
 All colors . . . . .  
 . . . . . 512 sq. ft. /gal. (11.78m<sup>2</sup>/L)  
 3.1 mils wet, 1.5 mils dry

**VOC Less Than** . . . . . 3.5 lbs. /gal (420 g/L)

**Solids by Weight**  
 All colors . . . . . 70% ± 2%

**Solids by Volume**  
 All colors . . . . . 48% ± 2%

**Weight Per Gallon**  
 All colors . . . . . 12-13 lb (5.7 kg)

**Flash Point of Liquid Coating** . . . . . 40°F (4.4°C)  
 (Pensky-Martens closed cup)

**Reducer/Cleaner** . . . . .  
 TemperKote Reducer

**Shelf Life** . . . . . 18 months (unopened)

**Packaging** . . . . . 1, 5 & 55 gal. containers

**Application** . . . . . Brush, roller, conventional and airless spray

**SURFACE PREPARATION:**

**STEEL:**

Surfaces should be sandblasted or mechanically wire brushed to remove rust, mill scale, oil, grease, and other contamination. A low profile white metal blast is preferred as it will give best results, especially where higher service temperatures are anticipated.

**APPLICATION:**

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

**STEEL:**

Apply one coat of Flame Control TemperKote 1400H to approximately 3 mils wet film thickness, (512 sq. ft. /gal.-all colors). (refer to characteristics section).

For best performance, it is essential that the temperature be taken up slowly, over a period of hours, to the normal operating temperature.

**APPLICATION EQUIPMENT:**

**Airless Spray**

Fluid pressure . . . . . 2500 psi  
 Strainer. . . . . 100 Mesh  
 Fluid hose . . . . . ¼" diameter  
 Tip . . . . . .015 - .019



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# FLAME CONTROL TemperKote® 1400H (Conforms to MIL-P-14105D)

## INDUSTRIAL HI-HEAT® COATING

\*Maximum Service Temperature 1400°F (760°C)

### **PRECAUTIONS:**

**DANGER! FLAMMABLE LIQUID & VAPOR: CONTAINS 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.