



TEMPERKOTE® 500

(Formerly Flame Control No. 500 Series)

AIR DRIES, NO HEAT CURING REQUIRED

HIGH PERFORMANCE INDUSTRIAL HEAT RESISTANT COATING

*Maximum Service Temperature 500°F (260°C)

DESCRIPTION:

TemperKote No. 500 High Performance Heat Resistant Coatings are based on a one component specially modified epoxy ester resin. The coatings air dry by polymerization and oxidation to form a tough, durable, heat, chemical, and moisture vapor resistant film. They do not require any complex heat-curing schedule to obtain their heat resistant properties.

No. 500 Series coatings are also suitable for use on stainless steel surfaces; they are formulated with special ingredients to minimize contamination from chlorides, other halides, sulfides, nitrates and metals which are known to induce external stress corrosion cracking. They contain no free metallic zinc and, therefore, will not contribute to embrittlement of stainless steel welds.

RECOMMENDED USES:

Wherever resistance to heat, humidity and corrosive atmospheric conditions is required. Can be used as a protective and decorative coating on metal parts, mufflers, hot water and steam lines, where operating temperatures will not exceed 500°F (260°C). **Not recommended** for use on the inside of ovens, stacks, etc. **DO NOT USE OVER GALVANIZED METAL OR ZINC RICH COATINGS.**

PERFORMANCE INFORMATION:

Provides excellent resistance to corrosive atmospheres, hostile environmental conditions, and temperatures up to 500°F (260°C).

CHARACTERISTICS:

Finish (*) Gloss

Resin Type Modified epoxy ester

Primer Phenolic Alkyd

Type of Cure Solvent evaporation/oxidation

Drying Time @ 77°F (25°C) & 50%

R.H.

(:) To touch ½ hour

(:) To recoat ½ - 1 ½ hours

If recoating cannot be done within that time, allow to cure for 7 days before recoating.

Curing Temperature & Time

Minimum curing

temperature 50°F (10°C)

Minimum curing

time N/A (See drying time above)

Application Temperature
50°F (10°C) to (:) 150°F (66°C)

Spreading Rate

Per Coat 420-560 sq.ft./gal.
(10.3-13.7 m²/L)

2.9-3.8 mils wet, 1-1.3 mils dry

Solids by Weight Varies with color

Solids by Volume Varies with color

Weight Per Gallon Varies with color

Flash Point

of Liquid Coating 80°F (26.6°C)
(closed cup)

Reducer/Cleaner Xylol or Xylene

Shelf Life 2 years (unopened)

Packaging 1, 5 & 55 gal. containers

Shipping Weight 4 gals. - 45 lbs.
5 gals. - 54 lbs.
55 gals. - 600 lbs.

Application Brush, roller, conventional and airless spray

(*) Gloss diminishes at higher temperatures.

(:) Varies with drying conditions; also, due to the thermoplasticity of the coating, when applied to hot surfaces (100° to 150°F [38° to 66°C]), it is important to note that the drying times will be greatly increased, as the coating stays soft and tacky for longer periods and full cure (hardness) may not be obtained for 7 days.

* Heat Resistance of Standard Colors:

No. 1 Black	Up to 500°F (260°C)
No. 2 Silver	Up to 500°F (260°C)
*No. 3 Lagoon	Up to 200°F (93°C)
*No. 4 Topaz	Up to 250°F (121°C)
*No. 5 Horizon	Up to 200°F (93°C)
*No. 6 Newport	Up to 250°F (121°C)
*No. 7 Mauve	Up to 200°F (93°C)
No. 8 Walnut	Up to 500°F (260°C)
*No. 9 Fawn	Up to 200°F (93°C)
*No.10 Russet	Up to 400°F (204°C)
*No.11 Quarry	Up to 200°F (93°C)
*No.12 Camouflage	Up to 350°F (177°C)
*No. 13 Dusty	Up to 200°F (93°C)
*No. 14 Golden	Up to 350°F (177°C)
*No. 15 Charcoal	Up to 450°F (232°C)
*No. 16 Steel	Up to 200°F (93°C)
*No. 17 Pewter	Up to 200°F (93°C)
*No. 18 White	Up to 200°F (93°C)
Primer	Up to 500°F (260°C)

*NOTE: All standard colors will withstand dry service temperatures up to 500°F (260°C). However, the temperature listed for each color indicates the maximum temperature that color will withstand, with minimal color change. Above the temperature shown, a significant color change will occur. This color change is **not reversible**.

SURFACE PREPARATION:

STEEL: Sandblast or mechanically wire brush surface. Remove all contaminants. i.e. rust, grease, wax, oil, mill scale, etc. See application below for primers. A low profile sandblasted surface will give best results, especially where the higher temperature limits will be reached.

AGED MASONRY: Scrape, wire brush, or sandblast to remove loose particles of concrete and foreign matter. All oil, grease, and form release compounds must be removed prior to painting surfaces.



TEMPERKOTE® 500

(Formerly Flame Control No. 500 Series)

AIR DRIES, NO HEAT CURING REQUIRED

HIGH PERFORMANCE INDUSTRIAL HEAT RESISTANT COATING

*Maximum Service Temperature 500°F (260°C)

APPLICATION:

Mix paint 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 films than specified, as the coating may blister.

STEEL: Where maximum corrosion resistance is desired, apply one coat of TemperKote No. 500 Fast Dry Primer to achieve a maximum dry film thickness of 1.5 mils (500 sq. ft./gal.). Under normal drying conditions, No. 500 Primer can be topcoated in 45 minutes. After the primer is dry, apply one uniform coat of No. 500 Series, in the desired color, to achieve a dry film thickness of 1 to 1.3 mils per coat or No. 500 Series may be applied direct to low profile sandblasted metal without a primer, in two uniform coats at the above film thickness.

Note: TemperKote No. 500 Series **No. 2 SILVER** Heat Resistant Coating should be applied direct to metal, without primer. Two coats are recommended for best results.

AGED MASONRY: Apply No. 500 Series direct to clean masonry surfaces, without primer. Best results are obtained by applying two uniform coats at a wet film thickness of 4 to 5 mils per coat (320 to 400 sq.ft./gallon/coat).

Note: No. 500 Series Heat Resistant Coatings air-cures, and, unlike other heat resistant paints, they do not require a complex heat-curing schedule to obtain the indicated heat resistance

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:

Conventional Spray

Air supply 12 CFM,
50 psi at nozzle, fluid 15-20 psi
Gun. Graco 217-800 to 217-816
Type External mix
Reduction. Up to 7%

Airless Spray

Titan 740 Impact (or Equivalent)

Pump
Fluid Pressure. 2700-3100 psi
Manifold Filter 60 Mesh
Gun Filter 60 Mesh
Fluid Hose ¼" diameter
Gun LX-80 II
Tip.015 - .021

PRECAUTIONS:

WARNING! FLAMMABLE LIQUID & VAPOR: CONTAINS XYLENE & 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.