



# FLAME CONTROL NO. 1212-MSF LOW V.O.C. SERIES

SERIES HI-TEMPERATURE  
HIGH PERFORMANCE INDUSTRIAL HEAT RESISTANT COATING

\*Maximum Service Temperature – No. 1 Black 1000°F (538°C)  
No. 2 Silver 1200°F (649°C)

## DESCRIPTION:

Flame Control No. 1212-MSF Low V.O.C. Hi-Temperature Coatings are based on a modified silicone resin fortified with ceramics. The system cures by solvent evaporation, polymerization, and subsequently by the fusion of the ceramics. Available in Silver and Black. Cures at 350-400°F (177-204°C). **DOES NOT AIR CURE.**

## RECOMMENDED USES:

Wherever maximum resistance to heat and chemicals is required. This product is a high performance coating, exceeding the performance requirements of Federal Specification No. TT-P-28. For use on interior and exterior surfaces, such as stacks, pipes, stoves, mufflers, and other metal parts. Resistant to temperatures up to 1200°F (649°C). Not recommended for use on the inside of ovens, stacks, etc.

## PERFORMANCE INFORMATION:

Primarily designed for use on high temperature smoke stacks, boiler fronts, and doors, breeches, jet and turbine engine components, mufflers and other surfaces where curing is easily facilitated by operational heat. Provides excellent resistance to corrosive atmospheric environmental conditions and hi-temperature. Care must be taken that surface temperatures do not exceed the limits of the coatings.

## CHARACTERISTICS:

**Finish** . . . . . (\*) Flat

**Resin Type** . . . . . Modified silicone

**Type of Cure** . . . . . Solvent evaporation/  
fusion

**Drying Time @ 77F (25C) & 50% R.H.**

To touch . . . . . 45 minutes  
To recoat . . . . . 2 hours  
Full cure . . . . . Heat cure required,  
Begin full cure within 24 hours,  
see below

## Curing Temperature & Time

Minimum curing temperature. . . . . 350-400°F (177-204°C)  
Minimum curing time. . . . . 1 hour

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

**Spreading Rate Per Coat** . . . . .  
500 sq.ft./gal. (12.3 m<sup>2</sup>/L)  
3.2 mils wet, 1.0 mils dry

**V.O.C. Less Than** . 3.5 lbs./gal. (420 g/L)

**Solids by Weight** . . . . . 49.5 ± 2

**Solids by Volume** . . . . . 31.5% ± 2%

**Weight per Gallon** . . . . . 9.6 ± 0.5

## Flash Point of

**Liquid Coating** . . . . . 40°F (4.4°C)  
(closed cup)

**Reducer/Cleaner** . . . . . Reducer 555

**Shelf Life** . . . . . 2 years (unopened)

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

**Shipping Weight** . . . . . 4 gals. - 39 lbs.  
5 gals. - 49 lbs.  
55 gals. - 550 lbs.

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

(\*) After heat curing one hour at  
350-400°F (177-204°C)

## \* Heat Resistance of Standard Colors

No. 1 Black . . . . . Up to 1000°F (538°C)  
No. 2 Silver. . . . . Up to 1200°F (649°C)

\* Maximum dry service temperature.

## SURFACE PREPARATION:

Sandblast all surfaces to a white metal finish, a low profile pattern will give best results.

Note: This coating adheres or fuses well to properly prepared surfaces, but will not adhere or fuse properly to other paints or contaminated surfaces.

## APPLICATION:

Mix paint thoroughly by boxing or stirring. Can be applied by brush, conventional or airless spray. Spray application is preferred, as a more uniform film is generally obtained. After surface preparation has been carried out, immediately apply two coats of No. 1212-MSF as follows. Apply at a coverage rate of approximately 500 sq.ft./gal. [3.2 mils wet, (1.0 mils dry)]. Allow to dry two hours or until hard, then apply a **Second Coat** at the same coverage rate.

**Do not apply heavier films, as the coating may blister.**

## CURING:

Flame Control No. 1212-MSF Coating must be heat-cured to obtain maximum properties. After final coat has been applied, air dry at least one hour (maximum 24 hours) before heating, then cure by gradually increasing the temperature to 350-400°F (177-204°C) hold one hour at that temperature for full cure.

After curing, 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

### 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



# FLAME CONTROL NO. 1212-MSF LOW V.O.C. SERIES

SERIES HI-TEMPERATURE  
HIGH PERFORMANCE INDUSTRIAL HEAT RESISTANT COATING

\*Maximum Service Temperature – No. 1 Black 1000°F (538°C)

No. 2 Silver 1200°F (649°)

---

## 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.