

# Thurmalox® 200 Series

**Air Dry Silicone Coatings Heat Resistant to 260°C Standard & Custom Colours**



## DESCRIPTION

*Thurmalox 200 series* coatings are single component heat resistant coatings based on modified silicone resins and thermally stable pigments. They are formulated specifically to protect metal surfaces operating to 500°F (260°C). For maximum corrosion protection prime metal surfaces with Thurmalox 210 modified silicone zinc dust heat and corrosion resistant primer and topcoat with Thurmalox 200 series. The 210 primer/200 series topcoat system provides outstanding adhesion, film integrity, colour stability, corrosion-, weathering-, and thermal shock-resistance throughout this entire temperature range. Thurmalox 200 series coatings are available in a wide range of standard (see Master Colour Card) and custom colours.

## RECOMMENDED USES

- Stacks, breechings, boiler casings
- Refinery equipment – Heaters, Crackers
- Reformers
- Furnaces, Kilns, Ovens
- Compressors, Turbines, Engineers
- Piping, Pumps, Manifolds
- Process Vessels, Heat Exchangers
- Stainless Steel

## FEATURES

- Air Dries, easy to apply
- One component system
- Withstands continuous temperature to 260°C
- Outstanding heat and weathering resistance
- Excellent colour stability to 260°C
- Outstanding Resistance to thermal shock

## NOT RECOMMENDED FOR

- Immersion service
- Service above 260°C
- Interiors of stacks, breechings and scrubbers
- Under insulation

## SURFACE PREP – CARBON STEEL

- 1) To ensure optimum long-term coating system performance, surfaces must be clean, dry and free from dirt, oil, grease, salts, welding flux, mill scale, rust, oxides, old paint, corrosion products or other foreign matter.
- 2) Remove all surface imperfections that will induce premature coating system failure. Chip or scrape off weld splatter. Grind down sharp and rough edges, gouges, and pits.
- 3) Abrasive blast surface per specification SSPC-SP10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5 - 2.0 mils minimum. Abrasive used in blasting should be selected carefully from materials of mesh size required to produce the desired anchor pattern.
- 4) If abrasive blasting is not permitted, prepare surface by power tool cleaning per SSPC-SP 11. Use 3M brand "Heavy Duty Roto Peen", type C flap wheel cleaning system mounted on an air-driven motor. This method will provide a surface equivalent to that provided by commercial blast cleaning per SSPC-SP6, including the desired surface profile (anchor pattern).
- 5) Feather out all edges of adjacent painted surfaces after completion of surface preparation operations

## SURFACE PREP – STAINLESS STEEL

- 1) Surfaces must be clean and dry. Remove all oil, grease, soil, drawing and cutting compounds, and other foreign matter by methods outlined in Steel Structures Painting Council Specification SSPC-SP1, "Solvent Cleaning".
- 2) DO NOT USE CHLORINATED SOLVENTS ON STAINLESS STEEL SURFACES.
- 3) For large surface areas, steam clean with an alkaline detergent; follow by a steam or fresh water wash to remove detrimental residues.
- 4) For small surface areas, solvent wipe with Dampney 170 Thinner, a chloride free solvent, using proper procedures and precautions to minimize hazards.



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Datasheet

## MIXING

Re-disperse any settled-out pigments by stirring with a paint paddle followed by thorough mixing to a uniform consistency with an explosion-proof or air-driven power mixer. Do not open containers until ready to use. Keep lid on container when not in use.

## APPLICATION GUIDELINES

Surface temperature must be at least 3°C above dew point.

### CARBON STEEL COATING SYSTEM

Coating System	Thickness
Thurmalox 210 Primer	50-62 microns
Thurmalox 200 Series	50-62 microns
Total Dry Film Thickness	100-125 microns



### UNISULATED STAINLESS STEEL

For optimum protection apply two coats of Thurmalox 200 to a dry film thickness of 50-62 microns per coat. Total recommended dry film thickness 100-125 microns

For application of other Thurmalox 200 series colours to stainless steel consult Speccoats Technical Service

## APPLICATION EQUIPMENT

Conventional spray is the recommended method of application, however Thurmalox 200 series coatings may also be applied by airless spray. Do not apply Thurmalox 200 series coatings in heavier films than specified since blistering may occur

 Airless Spray	Pump Ratio - 30 to 1 Min Nozzle Orifice - 11 to 15 Thou Tip Pressure - 100 Bar Min
 Conventional Spray	<ul style="list-style-type: none"> <li>Air Assisted Airless</li> <li>Pressure Pot - Pressure Feed Gun</li> <li>Gravity Feed Gun</li> <li>Various Nozzle sets are available to suit the guns</li> </ul>

**Brush** – Use only wooden-handle brush with short China bristles. Do not flood surface with coating. Brush out thoroughly, maintaining a continuous wet edge and uniform appearing paint film.

## APPLICATION GUIDELINES

**Rollers** – use only wooden-handles roller with phenolic core and ¼-3/8” nap. No not floor surface with coating. Roll out excess coating on a suitable screened surface. Then roll out thoroughly, maintaining a continuous wet edge and uniform appearing paint film

**Thinning** - Only thin Thurmalox 200 series coatings with Dampney 112 thinners. Note: use of other thinners not approved by Dampney may hinder product performance and void product warranty

**Dry Time** - Thurmalox 200 series will air dry tack and thumb print free within 1-2 hours. Allow 8 hours dry time between coats. Allow 24 hours dry time prior to shipping and handling. Surfaces coated with Thurmalox 200 series coatings can be handled and shipped as long as shipping and handling procedure for thin-filmed systems are followed. Avoid mechanical abrasion during shipping and handling. Allow one hour solvent flash off period before placing into service

**Clean Up** - Thoroughly flush spray equipment and hoses immediately after use with Dampney 100 Thinner. Dismantle spray equipment and clean parts, crushes and rollers with Dampney 100 Thinner.

**Storage** - Store in a cool, dry place with temperatures between 10°C - 38°C. Keep container closed when not in use

## PRECAUTIONARY INFORMATION

**WARNING:** Combustible Liquid and Vapour. Keep away from heat, sparks and flame. Vapours may cause flash fire. Do not breathe vapours or spray mist. Avoid contact with eyes, skin and clothing. Use with adequate ventilation during mixing and application. Wear an appropriate, properly fitted organic vapour cartridge-type respirator (NIOSH approved) during and after application unless air monitoring demonstrates vapour/mist levels are below applicable limits. Follow respirator manufacturer’s directions for respirator use. Wash thoroughly after handling. Wear protective gloves, chemical safety goggles and impervious protective clothing. Use skin cream. In confined spaces it is required to use a positive pressure supplied-air respirator (NIOSH approved). Use explosion-proof lights and electrical equipment. Use only non-sparking tools and equipment. Wear conductive and non-sparking footwear. Make certain all electrical equipment is grounded. Observe all safety precautions and follow procedures described in OSHA regulations. See Material Safety Data Sheet (MSDS) for complete precautionary and disposal information. If instructions and warnings cannot be strictly followed, do not use this product.

**FOR INDUSTRIAL USE ONLY**

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## TECHNICAL DATA

Characteristics	Thurmalox 200
Generic Type	Modified Silicone
Colour	See Master Colour Card. Also available in custom colours
Temperature Resistance	Continuous - 260°C
Percent Solids by Volume	41 %
Dry Film Thickness / Coat	50-62 Microns
Wet Film Thickness / Coat	112-137 Microns
Theoretical Coverage	15.7m <sup>2</sup> /lt at 25 microns
Application Temp. @50% RH	10°C -50°C
Cure Time 21°C @ 50% RH	To Touch – 1-2 Hours
	To Recoat – 8-10 Hours
	To Ship – 24 Hours
Cure Time 10°C @ 50% RH	To Touch – 2-3 Hours
	To Recoat – 10 Hours
	To Ship – 48 Hours
Thurmalox 200 Series	4.5 kg
Dampney 170 Thinners	3.7 kg
Dampney 112 Thinners	3.2 kg
Dampney 100 Thinners	3.2 kg
Flash Point	27°C
Shelf Life	1 Year
Volatile Organic Compounds	522g/L

## WARRANTY

Dampney protective coating products are expressly warranted to meet applicable technical and quality specifications. The technical data contained herein are accurate at the date of issuance but are subject to Change without prior notification. No warranty of current accuracy is hereby given or implied. User must contact Dampney to verify correctness before ordering. Dampney assumes no responsibility for coverage, performance or injuries resulting from handling or use and **LIABILITY, IF ANY, SHALL BE LIMITED TO PRODUCT REPLACEMENT.** In no event will Dampney be responsible for consequential damages, except insofar as mandated by law. Dampney **DISCLAIMS ALL OTHER WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**