Thurmalox® 200 Series
Air Dry Silicone Coatings
Heat Resistant to 500°F
Standard and Custom Colors

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, color 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 Color Card) and custom colors.

Recommended Uses
- Stacks, Breechings, Boiler Casings
- Refinery Equipment - Heaters, Crackers
- Reformers
- Furnaces, Kilns, Ovens
- Compressors, Turbines, Engines
- Piping, Pumps, Manifolds
- Process Vessels, Heat Exchangers
- Stainless Steel

Features
- Air dries, easy to apply
- One component system
- Withstands continuous temperature to 500°F (260°C)
- Outstanding heat and weathering resistance
- Excellent color stability to 500°F (260°C)
- Outstanding resistance to thermal shock

Not Recommended For
- Immersion service
- Service above 500°F (260°C)
- Interiors of stacks, breechings and scrubbers
- Under insulation

Surface Preparation - 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-SP 10, “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-SP 6, including the desired surface profile (anchor pattern).
5. Feather out all edges of adjacent painted surfaces after completion of surface preparation operations and prior to application of the first coat of paint.

Surface Preparation - 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-SP 1, “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.

Mixing
Redisperse 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.

Applications Guidelines
Surface temperature must be at least 5°F (3°C) above dew point.

Carbon Steel

Primer: Thurmalox 210 Primer	2.0-2.5 mils (50-62 microns)
Topcoat: Thurmalox 200 Series	2.0-2.5 mils (50-62 microns)
Total dry film thickness	4.0-5.0 mils (100-125 microns)

Uninsulated Stainless Steel *
For optimum protection apply two coats of Thurmalox 200 to a dry film thickness of 2.0-2.5 mils (50-62 microns) per coat. Total recommended dry film thickness is 4.0-5.0 mils (100-125 microns).
*
For application of other Thurmalox 200 series colors to uninsulated stainless steel consult Dampney Technical Service.

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

Conventional Spray:

Spray gun	DeVilbiss MBC-510
Fluid tip	AV115-FX (0.0425")
Air cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	40-45 psi

*Smaller hose diam. or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips	163-614, 163-616 (12"fan)
Pump	Graco Bulldog 30:1
Fluid hose	3/8" ID
Air pressure to pump	65-80 psi

Brush: Use only wooden-handled brush with short China bristles. Do not use synthetic-bristled brushes. Do not flood surface with coating. Brush out thoroughly, maintaining a continuous wet edge and uniform appearing paint film.

Roller: Use only wooden-handled roller with phenolic shank and core, and 1/4-3/8" nap. Do not flood 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 Thinner. Note: Use of other thinners not approved by Dampney may hinder product performance and void product warranty.

Dry Time 70°F (21°C) 50% RH
Thurmalox 200 series coatings 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 procedures for thin-filmed systems are followed. Avoid mechanical abrasion during shipping and handling. Allow one hour solvent flash off period before placing into service.

Cleanup
Thoroughly flush spray equipment and hoses immediately after use with Dampney 100 Thinner. Dismantle spray equipment and clean parts, brushes and rollers with Dampney 100 Thinner.

Storage
Store in cool, dry place with temperature between 50°F and 100°F (10°C and 38°C). Keep container closed when not in use.

Precautionary Information
WARNING! Flammable Liquid and Vapor. Keep away from heat, sparks and flame. Vapors may cause flash fire. Do not breathe vapors or spray mist. Avoid contact with eyes, skin and clothing. Use with adequate ventilation during mixing and application. Wear an appropriate, properly fitted organic vapor cartridge-type respirator (NIOSH approved) during and after application unless air monitoring demonstrates vapor/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 use of a positive pressure supplied-air respirator (NIOSH approved) is required. Use explosion-proof lights and electrical equipment. Use only nonsparking tools and equipment. Wear conductive and nonsparking 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

TECHNICAL DATA

Characteristics	Thurmalox 200 Series Coatings	
Generic Type	Modified Silicone	
Color	See Master Color Card. Also available in custom colors.	
Temperature resistance		
Continuous	500°F (260°C)	
Percent (%) Solids by volume	41	
Dry film thickness per coat	2.0 - 2.5 mils (50 - 62 microns)	
Wet film thickness per coat	4.5 - 5.5 mils (112 - 137 microns)	
Theoretical coverage per gallon	659 mil. sq. ft. (15.7 sq. m./liter @ 25 microns/liter)	
Application temperature @ 50% RH	50°F-120°F (10°C-50°C)	
Drying time @ 50% RH	50°F (10°C)	70°F (21°C)
To touch	2-3 hours	1-2 hours
To recoat	10 hours	8-10 hours
To ship	48 hours	24 hours
Weight per gallon		
Thurmalox 200 Series	10.0 lb. (4.5 kg.)	
Dampney 170 Thinner	8.0 lb. (3.7 kg.)	
Dampney 112 Thinner	7.2 lb. (3.2 kg.)	
Dampney 100 Thinner	7.2 lb. (3.2 kg.)	
Flash point	81°F (27°C)	
Pot life	N/A	
Shelf life	1 year	
Volatile organic compounds	4.35 lb./gal. (522 g./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.**