

Thurmalox® 260C

Air Dry Series VOC Compliant Self Priming to 260°C Standard & Custom Colours Apply Directly to Hot Steel



DESCRIPTION

Thurmalox 260C Series coatings are VOC compliant air drying, self-priming, heat and corrosion resistant coatings based on a silicone copolymer resin and a highly effective corrosion inhibitive pigment system. Thurmalox 260C series coatings are designed for application to ambient temperature metal surface or directly to hot metal surfaces up to 260°C of operating equipment. They provide a tough, chemically resistant, durable finish with excellent film integrity and colour stability. Thurmalox 260C series coatings protect metal surfaces from corrosion and weathering up to 260°C with peaks to 315°C. Thurmalox 260C series coatings are available in a wide range of standard and custom colours (see master colour card)
*Thurmalox 264C Aluminium is the only Thurmalox 260C series colour which may not be applied to hot surfaces above 93°C

RECOMMENDED USES

Application to surfaces where (1) the benefits of Thurmalox 260C coatings are needed, and where (2) federal, state and/or local authorities require high temperature coatings to be compliant with reduced VOC (Volatile organic compound) emission regulations.

- Refinery and chemical plant equipment
- Furnaces, heaters, heat exchangers
- Columns, fractionators, towers
- Riser lines, lift pipes, ducts
- Boilers, breechings, stacks
- Compressors, turbines, engines, pumps
- Flare lines and flare stacks
- Boil-out piping (steam-out lines)

FEATURES

- Air Dries, easily applied
- VOC Compliant 381 g/L
- Heat Resistant to 260°C with peaks to 315°C
- Excellent corrosion, chemical and weather resistance
- Direct application to metal surfaces as hot as 260°C only when applied by spray
- Outstanding colour stability to 260°C
- Hot equipment can be painted without being shut down
- May be applied to hot surfaces during the winter
- Excellent bond to stainless steel without the need to abrasive blast (see surface Preparation)
*Thurmalox 260C series black & aluminium-pigmented coatings are the only colours that are not self-priming. Apply any other Thurmalox 260C series coating as a prime coat

NOT RECOMMENDED FOR

- Direct application to surfaces having a surface temperature over 260°C
- Immersion service
- Interior of stacks, breechings and scrubbers
- Continuous temperature exposure above 260°C

SURFACE PREPARATION

SURFACE PREPARATION – CARBON STEEL

- 1) To Ensure optimum long-term system performance, surface must be clean, dry and free from dirt, oil greases, 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 spatter. Grind down sharp and rough edges, gouges and pit
- 3) Abrasive blast surface as per specification SSPC-SP 10 "Near-White blast cleaning", or per NACE Standard N0.2 to a profile depths of 25-55 microns minimum, with a 38micron anchor pattern being ideal. Abrasive used in blasting should be selected carefully from materials of mesh size required to produce the desired anchor pattern.
- 4) If abrasive blast cleaning is not permitted, prepare the surface by power tool cleaning per SSPC-SP 11/ use 2M brand "Heavy Duty Roto Peen.", type C flap wheel cleaning system mounted on an air driven motor. This method will produce 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 surface 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



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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

UN-INSULATED CARBON STEEL



Coating System	Thickness
Thurmalox 260C Series*	50-62 microns
Thurmalox 260C Series	50-62 microns
Total Dry Film Thickness	100-125 microns

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STAINLESS STEEL – UN-INSULATED

Coating System	Thickness
Thurmalox 260C	50-62 microns
Thurmalox 260C	50-62 microns
Total Dry Film Thickness	100-125 microns

Note: For application of other Thurmalox 260C series colours to un-insulated stainless steel consult the Speccoats Technical Service Department

 <p>Airless Spray</p>	<ul style="list-style-type: none"> • Pump Ratio – 30:1 • Fluid Tips – 11 – 15thou • Fluid Hose – 3/8 to 1/2" ID • Air Pressure to Pump – 100psi • Pump Operating Pressure 65-80 psi
 <p>Conventional Spray</p>	<ul style="list-style-type: none"> • Fluid Tip – FX 1.1 mm tip • Air Cap – 704 • Fluid Hose – 3/8 ID • Air Hose – 5/16"ID • Atomizing Pressure – 40-4psi

APPLICATION GUIDELINES

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 the 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

Procedures for application to hot surfaces:

- 1) All hot applications must be performed with spray equipment only
- 2) Flush spray equipment with Dampney 100 thinner before use
- 3) Thinning of Thurmalox 260C-series coatings is not normally require for spray application
- 4) Dampney 162 thinner is a high flash point (134°F), slow evaporating solvent formulated especially for application to hot surfaces
- 5) **WARNING! DO NOT** use any other solvents to thin Thurmalox 260C series coating. A fire hazard may result from use of solvents with low auto ignition temperatures when applying Thurmalox 260 series coatings to hot surface and rapid solvent evaporation can cause dry spray and poor film characteristics
- 6) Use Dampney 162 thinner cautiously. Addition of a small amount of thinner will cause a great reduction in coating viscosity
- 7) For conventional spray use adequate air pressure and volume to obtain proper atomization

Be aware that procedures for applying coatings to hot surfaces are somewhat different from those normally used for application to ambient temperature surfaces. The following factors should be taken into consideration

- a) Heat radiating from the surface and strong winds will promote dry spray
- b) To avoid dry spray, always apply coatings perpendicular to hot surfaces without stretching or reaching
- c) Perpendicular spraying will also minimize overspray and lap marks due to dry spray and overspray
- d) On each pass of the spray gun a thinner than normal paint film must be applied to facilitate the heat-accelerated escape of solvents without leaving pinholes or blisters
- e) Do not use tip sizes greater than 0.042 in. for surfaces above 177°C -204°C reduce tip size to 0.036 in. or 0.032 in.

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APPLICATION GUIDELINES

Thinning– Only thin Thurmalox 260C series coatings with Dampney 162 thinner. Note: use of other thinners not approved by Dampney may hinder product performance and void product warranty. Also see procedures for application to hot surfaces.

Clean Up– Thoroughly flush spray equipment and hose immediately after use with Dampney 100 thinner. Dismantle spray equipment and clean parts, brushes and roller with Dampney 100 thinner

Storage– store in a cool dry place with temperatures between 10°C and 38°C. keep container closed when not in use.

Cure time at 21°C, 50% RH

Thurmalox 260C series coatings will air dry tack and thumb print free with 6-8 hours. Allow 10-12 hours dry time between coats. Allow 48 hours dry time prior to shipping and handling if coating is not heat cured. Surfaces coated with Thurmalox 260C coatings can be handled and shipped prior to a heat cure as long as shipping and handling procedures for thin filmed systems are followed. Higher temperatures will reduce tack free, recoat and shipping times. Allow one hour solvent flash off period before heat curing or placing into service. Optimum film properties require a heat cure of 177°C for 30 minutes. Equipment protected with the Thurmalox 260C series coatings in the air dried state will heat cure when placed into service

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

TECHNICAL DATA

Characteristics	Thurmalox 260C series
Generic Type	Silicone Co-Polymer
Colour	See master colour card
Temperature Resistance	Continuous – 260°C Intermittent –315°C
Percent Solids by Volume	52%
Dry Film Thickness / Coat	50-60 Microns
Wet Film Thickness / Coat	87-100 Microns
Theoretical Coverage	20m ² /lt at 25 microns
Application Temp. @50% RH	10°C -260°C
Cure Time 10°C @ 50% RH	To Touch –10-12 Hours To Recoat – 24 Hours To Ship – 72 Hours
Cure Time 21°C @ 50% RH	To Touch – 6-8 Hours To Recoat – 10-12 Hours To Ship – 48 Hours
Full Cure @ 177°C	30 minutes
Thurmalox 260C series Dampney 162 Thinners Dampney 170 Thinners Dampney 100 Thinners	6.1 kg 3.1 kg 3.7 kg 3.2 kg
Flash Point	57°C
Shelf Life	1 Year
Volatile Organic Compounds	381 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.**