

Thurmalox® 210C

**Air Dry VOC Compliant Silicone Zinc
Dust Primer Heat Resistant to 260°C**



DESCRIPTION

Thurmalox 210C Primer is a VOC Compliant, heat and corrosion resistant primer formulated from modified silicone resins and zinc dust. Thurmalox 210C Primer provides outstanding corrosion protection for metal surfaces operating at temperatures to 260°C. Thurmalox 210C is the primer for Thurmalox 200C series, VOC Compliant, heat resistant topcoats. The 210C primer/200C series topcoat system has excellent Intercoat adhesion and is able to withstand severe thermal shock throughout the entire temperature range.

RECOMMENDED USES

Application to surfaces where (1) the benefits of Thurmalox 210 C series 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

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

FEATURES

- VOC compliant 381g/L
- Air Dries, easy to apply
- Withstands continuous temperature to 260°C
- Prevents rusting and streaking of steel during shutdowns
- Easily top coated with Thurmalox 200C series heat resistant topcoats
- Excellent Intercoat adhesion
- Protects against weathering and corrosion
- Prevents under film corrosion attack

NOT RECOMMENDED FOR

- Immersion service
- Stainless Steel
- 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

MIXING

Thurmalox 210C Primer is a two package system consisting of a base component and zinc that are mixed together before use. Sift zinc dust slowly into base with continuous mechanical agitation. Mix thoroughly until free of lumps. Pour mixture through 30-mesh screen. If a partial unit is needed, mix by weight 10 parts base component with 3 parts Zinc Dust component



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Datasheet

APPLICATION GUIDELINES



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

UNINSULATED CARBON STEEL

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

APPLICATION EQUIPMENT

Conventional spray is the recommended method of application, however Thurmalox 210C Primer may also be applied by airless spray. Do not apply Thurmalox 210C Primer in heavier films than specified since blistering may occur. Do not apply Thurmalox 210C by roller

 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"> Air Assisted Airless Pressure Pot - Pressure Feed Gun Gravity Feed Gun Various Nozzle sets are available to suit the guns

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.

Rollers – do not apply by roller

Thinning – Thurmalox 210C is to be used as supplied. If thinning is necessary only thin with Dampney 180 VOC Thinner. Do not thin beyond Federal, State, and/or Local VOC (Volatile Organic Compound) emission regulations. Note: use of other thinners not approved by Dampney may hinder product performance and void product warranty.

APPLICATION GUIDELINES

Dry Time - Thurmalox 210C primer 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 210C primer 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 180 Thinner. Dismantle spray equipment and clean parts, crushes and rollers with Dampney 180 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

<i>Characteristics</i>	<i>Thurmalox 210C</i>
<i>Generic Type</i>	<i>Silicone Zinc Dust</i>
<i>Colour</i>	<i>Dark Grey</i>
<i>Temperature Resistance</i>	<i>Continuous - 260°C</i>
<i>Percent Solids by Volume</i>	<i>30%</i>
<i>Dry Film Thickness / Coat</i>	<i>50-62 Microns</i>
<i>Wet Film Thickness / Coat</i>	<i>150-200 Microns</i>
<i>Theoretical Coverage</i>	<i>11m²/lt at 25 microns</i>
<i>Application Temp. @50% RH</i>	<i>10°C -50°C</i>
<i>Cure Time 21°C @ 50% RH</i>	<i>To Touch – 1-2 Hours</i>
	<i>To Recoat – 8 Hours</i>
	<i>To Ship – 24 Hours</i>
<i>Cure Time 10°C @ 50% RH</i>	<i>To Touch – 4-6 Hours</i>
	<i>To Recoat – 10-12 Hours</i>
	<i>To Ship – 48 Hours</i>
<i>Thurmalox 210C Primer Dampney 180 Thinner</i>	<i>6.3 kg 5.2 kg</i>
<i>Flash Point</i>	<i>27°C</i>
<i>Shelf Life</i>	<i>1 Year</i>
<i>Volatile Organic Compounds</i>	<i>381g/L</i>

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.**