



## Thurmalox 2700 Series Water-Based Silicone High Temperature Coating

### Description

Thurmalox 2700 Series is a high temperature resistant water-based silicone protective coating that offers excellent weathering, chemical and UV resistance. Thurmalox 2700 is a high performance OEM finish designed for the protection of equipment exposed to temperatures up to 1100°F (600°C).

### Recommended Uses

- Light Fixtures
- Coal, gas, pellet and wood stoves.
- Stove Pipe
- Fireplaces and fireplace inserts
- Furnaces, radiators and heaters
- Exterior of ovens and food processing equipment exposed to high temperatures
- Painting of high temperature equipment where volatiles and odor are a concern

### Features

- Resistant to 1100°F (600°C)
- Complies with SCAQMD Rule 1113
- Non-flammable
- Low VOC for sensitive environments
- Low odor for sensitive environments
- Dries Fast
- Withstands thermal cycling
- Excellent mechanical and physical Properties
- Single package
- Quick, easy clean up

### Not recommended for

- Direct contact with cooking surfaces
- Direct contact with flame

### Surface Preparation

To ensure optimum long term coating performance, surfaces must be clean, dry, and free from dirt, oil, grease, salts, welding flux, oxides, old paint or other foreign matter.

**Carbon Steel:** Cleaners can be alkaline, acidic, solvent, or emulsion type. Chemical cleaning can be accomplished by using a six (6) stage multi stage phosphate cleaning system or abrasive blast to SSPC SP 10 (NACE 2) "Near-white blast cleaning" with a

sharp angular blast profile of 1.0 to 2.0 mils (25-50 µm). Note: Dampney Company is not responsible for issues related to pre-treatments, cleaners or conditioners produced by other manufacturers or their performance in elevated temperature service. Customers should test compatibility of pretreatments with Thurmalox 2700 in elevated temperature service to determine suitability.

**Galvanizing and Non-ferrous Metals:** Clean all surfaces to remove oils or soap films with an emulsion cleaner or a solvent cleaner such as Dampney #170, then use a surface prep conditioner or prepare in accordance with SSPC-SP16 using fine abrasive such as garnet or aluminum oxide. Care should be taken to ensure thin gauged metals are not warped or distorted from the blasting process.

### Mixing

Redisperse any settled-out pigments by stirring with a paint paddle, followed by a through mixing to a uniform consistency with an air driven explosion-proof 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 5°F (3°C) above the dew point. Surface temperature should be between 50°F (10C) - 120°F (48°C) at time of application. Depending on requirements Thurmalox 2700 can be used as a one or two coat system as follows:

Thurmalox 2700 Series (1 <sup>st</sup> coat)	2.0 to 3.0 mils (50-75 microns)
Thurmalox 2700 Series (optional 2 <sup>nd</sup> coat)	2.0 to 3.0 mils (50-75 microns)

### Application Equipment

The following is an equipment guideline for the application of this product and may have to be changed because of conditions at the point of application. Apply via brush, roller, conventional or airless spray.

#### Conventional Spray: As a guide only:

Pressure pot equipped with air driven mixer and dual regulators. 5/8" I.D. material hose, 1/2" I.D. air hose, with recommended air cap and air nozzle as manufactured by Binks or DeVilbiss.

**Airless Spray: As a guide only**

Spray Pump*	30:1 or equal
Air pressure to pump	90 to 100 lbs.
Total pressure	2400 to 2700 psi
Tip pressure	1600 to 2000 psi
Spray tip	(.013" to .017")
Filter size	60 mesh

\*Use teflon packings in pump.

**Brush:** Using a synthetic brush, maintain a wet edge at all times. Avoid excessive re-brushing.

**Roller:** use a short-nap synthetic roller with phenolic core. Avoid excessive re-rolling.

**Thinning**

Formulated for use as supplied. Do not thin.

**Cleanup**

Clean all equipment immediately after use with clean fresh water. Use isopropyl alcohol to flush all equipment.

**Dry time**

Thurmalox 2700 Series air dries to handle in 2 hours. For optimum cure and film hardness, coating can be cured in production line with infrared lights or heat

**Bulletin 2700**

cured in an oven at 400°F to 530°F (200°C to 280°C) for 15 minutes.

**Storage**

Store in a cool dry place with temperature from 50°F to 110°F (9.9°C TO 43°C).

**Precautionary Information****Warning! Harmful If Inhaled. Causes Irritation.**

**Hazards:** Do not breathe vapor or spray mist. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation during mixing and application. Only open container in a well ventilated area. Wear appropriate, properly fitted respirator (NIOSH) approved during and after application unless air monitoring demonstrates vapor/mist levels are below applicable limits. Follow manufacturer's directions for respirators use. Wear neoprene gloves, chemical goggles and protective clothing. In confined areas use a constant flow, airline, hood-type respirator. Observe safety precautions described in OSHA regulations.

**See Material Safety Data Sheets (MSDS) for complete precautionary and disposal information.**

**For Industrial Use Only****TECHNICAL DATA**

Characteristics	Thurmalox 2700 Series
Generic Type:	Water-based Silicone
Color:	Black
Finish:	Matte
Number of Component(s):	One (1)
Solids by Volume:	24±2%
Weight Per Gallon (3.78 liters)	11.00 lbs. (4.98 Kg)
Theoretical Coverage Per Gallon at 2.0 mils (50µm) DFT	192 ft <sup>2</sup> /gal (4.7m <sup>2</sup> /l)
Temperature Resistance (varies by color)	
Continuous:	Black 1000°F
Intermittent:	Black 1100°F
Dry Film Thickness Per Coat	2 to 3 mils (100-150 µm)
Wet Film Thickness Per Coat	8 to 16 mils (200-325 µm)
Dry Time: 70°F (21°C) at 50% RH	
To Touch	1 hour
To Recoat	1 hour
To Handle	2 hours
To Ship	8 hours
Curing Schedule	400°F for 15 Minutes (Please consult Dampney for curing recommendations)
Pot Life	N/A
Shelf Life	6 Months
VOC	1.2 lbs./gal

**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.