



**Dampney**

**OEM**

**Protective Coatings**

## Thurmalox® 8886 Series Heat Resistant Coating

**Generic Type: Two Component Silicone Copolymer**

### Technical Data

Color	Clear, Black, & Custom
Gloss	50 @ 60 degree
Temperature resistance	
Continuous	450°F (232°C)
Intermittent	600°F (316°C)
Percent (%) solids by volume	51±2%
Dry film thickness	2.5 – 5 mils
Wet film thickness	5 – 10 mils
Theoretical coverage per gal	802 sq.ft. @ 1 mil DFT
Shelf life	6 months
Volatile Organic Compound	
8886 Clear	2.8 lbs per gal
8886-02 Black	3.35 lbs per gal
Full cure @ 350°F (177°C)	30 minutes
Full cure @ 70°F (21°C)	7 days
Mix Ratio by Volume	2 Parts A to 1 part B
Application temp. @ 50% RH	50°F (10°C)
Flash point (Pensky Martens)	23°F (-5°C)
Dry time at 50% RH Substrate	70°F (21°C)
Dry to handle	4 hours
Dry to topcoat	12 – 18 hours
Applications condition	
	<u>Material</u> <u>Surface</u> <u>Ambient</u> <u>Humidity</u>
Normal	60-90°F      65-85°F      65-90°F      10-65%
	16-32°C      18-29°C      18-32°C
Minimum	60°F (16°C)      60°F (16°C)      60°F (16°C)      0%
Maximum	105°F      110°F      100°F      65%
	(40°C)      (45°C)      (41°C)
Shipping information	Weight per gallon
Thurmalox 8886A-02	13.1 lb. (5.94 kg.)
Thurmalox 8886A Clear	10.2 lb. (5.94 kg.)
Thurmalox 8886B	9.1 lb. (4.12kg.)
Dampney 100 Thinner	7.20 lb. (3.2 kg.)

### Description

A high performance two component high temperature silicone copolymer for service in harsh environments, it forms a tough durable film that adheres strongly to properly prepared surfaces. Thurmalox 8886 provides long term durability in weathering conditions as well as temperature resistance and acts as a barrier coating against chemical attack from glycol cooling agents and synthetic lubricants at operating temperatures up to 450°F (232°C).

### Recommended Uses

- Valves Castings
- Pump, pump housing and sump
- Air compressors, exhaust systems, pipes etc.

### Not Recommended For

- Immersion in aromatic hydrocarbons

### Features

- Resistance to elevated temperatures
- Long-term durability and weather resistance

### Limitations

Do not apply at temperatures below 60°F (16°C) or under conditions where temperatures may drop below 60°F (16°C) within 24 hrs after application. Do not apply Thurmalox 8886 series when the surface temperature is less than 5°F above the dew point. Do not apply to previously coated surfaces without checking for coating compatibility and adhesion to previously primed or coated surfaces.

### Substrates

Clean, smooth carbon-steel stainless steel, blasted steel, phosphatized steel, galvanized, copper, aluminum, and primed steel.

### Surface Preparation

Surface must be clean and dry. Remove all oil, grease, soil, drawing and cutting compounds, and other foreign matter detrimental to the adhesion of this coating as outlined in SSPC-SP 1 "Solvent Cleaning".

All machined steel, copper and aluminum surfaces are to be prepared according to SSPC-TR/NACE 6G194 (phosphate cleaning) and all carbon steel and cast iron surfaces are to be prepared following "SSPC-SP10 Near-white Blast Cleaning Standard" leaving a 2 – 2.5 mil profile in all blasted surfaces.

### Mixing

Thurmalox 8886 is a two component coating consisting of part A and part B which must be mixed together before use. The mix ratio for Thurmalox 8886 is two (2) to one (1) by volume. The individual component should be mixed separately to disperse pigment uniformly. Add part B to part A and mix thoroughly with a power mixer until mixed completely and of a uniform color. Do not open container until ready to use. Keep lid on container when not in use.

### Pot Life

Thurmalox 8886 is a two (2) component product which has a pot life of 12 hours at 70°F (21°C). Keep container closed when not in use. If a skin forms on surface, do not mix in, remove from container.

### Thinning

This product is ready to use as shipped, thinning is not normally required. If thinning is required use Dampney 100 thinner. Over thinning may hinder product performance and void product warranty.

### Application Equipment

**Brush application:** Touch-up only.

**Spray equipment:** A wide variety of spray equipment can be used, such as airless, standard conventional, conventional HVLP, Conventional HTE or air assisted airless.

## Dry Time 70°F (21°C) 50% RH

Thurmalox 8886 will dry to touch in 4 hours at 70°F (21°C) and 50% RH. Cure time will vary with type of heat used and substrate mass.

## Cleanup

Thoroughly flush spray equipment and hoses immediately after use with Dampney 100 Thinner.

## Performance Information

Abrasion resistance – ASTM D4060 CS-17 – 1kg load – 1000 cycles	251 mg
Direct impact resistance ASTM –G-14	20 in. lb.
Dry heat resistance ASTM D2485 450°F (232°C)	Discolors
Adhesion – Elcometer ASTM D4541	100 in. lb.
Exterior durability	Excellent
Flexibility ASTM D1737 –180° Bend 1/8" Mandrell	Passes
Moisture Condensation ASTM D2247 1,000 hrs at 100°F (38°C)	Excellent
No rusting, blistering or delamination	
Pencil hardness ASTM D3363	7H
Salt fog resistance ASTM B117 – 1,000 hrs 80°F	Excellent
No blistering, softening, cracking or delamination	
Humidity – Thermal cycling ASTM D2246 – 15 Cycles	Excellent
No cracking or rusting	

## Resistance Guide

Resistance to fumes, splash, spillage and ASTM D3912	
Aliphatic hydrocarbons	Good
Alkalies	Excellent
Aromatic hydrocarbons	Good
Fresh water/salt water	Excellent
Alcohols	Excellent
Inorganic acids	Excellent
Oil, cutting oil, vegetable oil	Excellent

## Direct Immersion

Polypropylene glycol ester lubricant – 240 hours	No effect
Paraffinic mineral oil lubricant – 240 hours	No effect
Ethylene glycol coolants – 240 hours	No effect

## KEEP OUT OF THE REACH OF CHILDREN

## Made in the USA.

## Precautionary Information

### WARNING: Flammable liquid and Vapor

Inhalation of vapor or spray mist can cause headache or nausea and irritation of the nose, throat and lungs. **Hazards** Keep away from heat, and flame. Do not breathe vapors or spray mist. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation during mixing and application. Respiratory protection is not required if good ventilation is maintained. 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 it is required to use a positive pressure supplied-air respirator (NIOSH approved). Observe all safety precautions and follow procedures described in OSHA regulations.

**See Material Safety Data Sheet (MSDS) for complete precautionary information.**

**If instructions and warnings cannot be strictly followed, do not use this product.**

## FOR INDUSTRIAL USE ONLY

## 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 subjected 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.