



Dampney Protective Coatings

Thurmalox[®] 290 Series Air Dry Silicone Coatings Heat Resistant to 1200° F

Description

Thurmalox 290 series coatings are high performance, heat resistant silicone coatings designed specifically to maximize adhesion and protect difficult to coat metal surfaces such as aluminized and stainless steel. These coatings retain their film integrity, adhesion and color stability up to 1200° F (648° C).

Recommended Uses

- Engine exhaust components
- Stoves (wood, coal, pellet, gas, etc.)
- Fireboxes
- Free-standing fireplaces and fireplace inserts
- Stovepipe and chimney caps

Features

- Withstands temperatures to 1200° F (648° C)
- Excellent bond to carbon, aluminized and stainless steel
- Resistant to thermal cycling and expansion
- Fast drying - Air dries for handling in 15 minutes
- Prevents wet chlorides in the atmosphere from concentrating on hot stainless steel surfaces
- Free of heavy metal pigments
- Available in 12 oz. aerosol cans for touch-up

Not Recommended For

- Immersion service
- Direct contact with flame
- Cooking surfaces

Surface Preparation

1. To ensure optimum long term coating system performance, surfaces must be clean, dry and free from dirt, oil grease, salts, welding flux, oxides, old paint or other foreign matter.
2. Prepare surface by power washing, vapor degreasing, solvent cleaning or other chemical and mechanical methods.
3. Methods recommended will depend upon type of foreign matter to be removed and condition of substrate. Consult Dampney Technical Service for specific recommendations.

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.

Application Guidelines

1. One coat of Thurmalox 290 series coatings at 1.0 mil (25 microns) is suitable for use on stoves and other hearth accessories.
2. For optimum protection apply two coats of Thurmalox 290 series coatings to a dry film thickness of 1.0 mil (25 microns) per coat. Total recommended dry film thickness is 2.0 mils (50 microns).
3. The number of coats of Thurmalox 290 series coatings needed depends upon service conditions of equipment.

Application Equipment

Apply by airless, conventional, or HVLP spray methods. Application by roller is not recommended. Application by brush is also not recommended except for porous surfaces such as cast iron.

Thinning

Only thin Thurmalox 290 series coatings with Dampney 100 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 290 series coatings will air dry tack and thumb print free in 15 minutes and will dry hard in 8 to 12 hours. Allow 1 hour minimum dry time between coats at 70° F (21° C) and 1/2 hour minimum dry time between coats at 90° F (32° C). Coating has excellent recoat properties. Optimum film properties require a heat cure of 350° F (177° C) for 30 minutes.

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 it is required to use a positive pressure supplied-air respirator (NIOSH approved). 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 Safety Data Sheet (SDS) for complete precautionary and disposal information.

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

FOR INDUSTRIAL USE ONLY

Shipping Weights

	1 gal	5 gal	55 gal
Thurmalox 290	11 lb (5.0kg)	46 lb (20.9kg)	525 lb (238.1kg)
Dampney 100	9 lb (4.1 kg)	42 lb (19.1 Kg)	

Thurmalox 290 series coatings are available in 12 oz. aerosol cans - 2 lb. (.9 kg). The 12 oz. aerosol cans are available in a case of 12 - 12 lb. (6.4 kg).

TECHNICAL DATA

Characteristics	Thurmalox 290
Generic Type	Silicone
Color	Black and custom colors
Finish	Flat
Temperature resistance	
Continuous	1000°F (538°C)
Intermittent	1200°F (649°C)
% solids by volume	17.5
Viscosity	35-40 sec. Zahn No. 4 cup
Dry film thickness per coat	0.75 - 1.0 mils (19 - 25 microns)
Wet film thickness per coat	4- 5 mils (100 - 125 microns)
Theoretical coverage per gallon	280 mil. sq. ft. (26 sq. m. @ 25 microns)
Application temperature @ 50% RH	60-90° F (16-32° C)
Drying time @ 70° F (21° C) 50% RH	
To touch	15-20 minutes
To handle	20-30 minutes
To recoat	1-2 hours
Weight per gallon	
Thurmalox 290 Series	8.8 lb. (4.0 kg.)
Dampney 100 Thinner	7.1 lb. (3.2 kg.)
Flash point (Pensky Martens)	45°F (7°C)
Pot life	N/A
Shelf life	1 year
Volatile organic compounds	5.95 lb./gal. (708 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.