

to go directly to product data sheet when viewing the catalog hold your mouse over the product name or number and click

Protective Coatings

Dampney's Engineered Coatings

Since 1917, Dampney Company, Inc. of Everett, MA, has designed, developed, manufactured, and distributed engineered coating systems for specialized applications. Dampney Serves the refining, petro chemical, chemical processing, oil and gas, pipeline, power, OEM, pulp and paper, and materials processing markets.



Today, Dampney is a world class leader supplying high-performance, high temperature solutions throughout the world.

Dampney's Innovative Coatings Systems:

Thurmalox[®]

Industrial high-temperature protective coatings.

Apexior[®]

Coatings for resistance to boiling water/steam and waterside corrosion.

Protexior[®]

A high performance epoxy, voc compliant coating formulated to resist a wide range of acids, oils, and chemicals.

Stove Paint

Dampney has served the home and hearth industries for many years providing high performance heat resistant coatings to meet their ever changing needs.

OEM Products

Dampney OEM product finishes and Thurmalox OEM high-temperature patching compounds and coatings.

Dymacryl

Dymacryl masonry stains have a proven record of protecting surfaces against damage caused by water absorption.

Endcor

Corrosion resistant coatings include silicone alkyd, thermo setting epoxy, inorganic zincs, acrylic urethane, water borne silicone, coal tar epoxy, elastomeric, cold galvanizing compound

Elastoid[®]

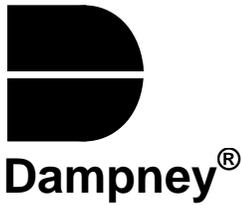
Single package high build elastomeric coating and vapor barrier

Epodur[®]

Coal tar epoxy/urethane epoxy primer/underwater epoxy coating/solvent free epoxy coating/floor coatings/concrete restoration products/skid resistant epoxy broadcast floor system

Catalog Index

History	
Client List	
Product Guide	Dampney Product Selection Guide
Apexior® #1	One component, boiling water / steam immersion coating to 700°F (371°C)
Apexior #1C	VOC compliant, high solids Apexior #1
Apexior #3	One component, fresh / salt water immersion coating from -40°F to 140°F (-40°C to 60°C)
Apexior #3C	VOC compliant, high solids Apexior #3
Protexior® 794	A high performance epoxy, voc compliant coating formulated to resist a wide range of acids, oils, and chemicals.
Protexior 795	A two-component, general purpose, high performance VOC compliant primer for service in moderate to severe chemical and corrosion exposures.
Thurmalox® 70	Prevents chloride induced external stress corrosion cracking from cryogenic to 1000°F (-250°C to 538°C)
Thurmalox 70C	VOC compliant, high solids Thurmalox 70
Thurmalox 200	Heat resistant coatings, color stable ambient to 500°F (260°C) **
Thurmalox 200C	VOC compliant, high solids Thurmalox 200
Thurmalox 210	Zinc silicone primer, heat resistant ambient to 500°F (260°C)
Thurmalox 210C	VOC compliant, high solids Thurmalox 210
Thurmalox 218 / 219	For under insulation, boiling water immersion grade, apply directly to hot steel up to 350°F (176°C) with service temperatures up to 450°F (232°C)
Thurmalox 225HD	VOC compliant, high build coating from 300°F to 1000°F (148°C to 538°C)
Thurmalox 230	Heat resistant coatings, color stable ambient to 1000°F (538°C) **
Thurmalox 230C	VOC compliant, high solids Thurmalox 230
Thurmalox 240	Heat resistant coatings from 1100°F to 1400°F (593°C to 760°C)
Thurmalox 242	Heat resistant coatings from 1100°F to 1600°F (593°C to 871°C)
Thurmalox 245	Silicone zinc dust primer from 500°F to 1200°F (260°C to 648°C)
Thurmalox 245C	VOC compliant, high solids Thurmalox 245
Thurmalox 260	Apply directly to hot steel ambient to 500°F (260°C) for atmospheric exposure **
Thurmalox 260C	VOC compliant, high solids Thurmalox 260
Thurmalox 260C TIC	Temperature indicating coatings with color change
Thurmalox 280	High temperature aluminum coating, ambient to 1200°F (649°C)
Thurmalox 280C	VOC compliant, high solids Thurmalox 280
Thurmalox 2600	High build coating, ambient to 600°F (316°C), for air pollution control equipment
Thurmalox 2655	High temperature caulk sealant, ambient to 550°F (288°C)
Lab-metal	High temperature repair/ patching compounds, ambient to 350°F (176°C)
Hi-Temp Lab-metal	High temperature repair/ patching compounds, ambient to 1000°F
Color Card	Thurmalox Master Color Card - 17 standard colors (custom colors available)
Dampney Brochure	Dampney stand-alone product brochure



Protective Coatings

INTRODUCTION TO DAMPNEY COMPANY, INC.

HISTORY

Since 1917, Dampney Company, Inc. has manufactured technically advanced, corrosion resistant protective coatings for specialized applications in industries including refining, chemical processing, primary metal, utility, pulp and paper and OEM. Our valued customers include many of the world's largest corporations.

Dampney's experience in the field of high performance coatings dates back to 1906 when English researcher John Dampney first produced and marketed Apexior® Number 1®, a unique protective coating capable of preventing corrosion of the internal surfaces of steam boilers, turbines, and auxiliary equipment. Application of Apexior coatings solved many costly corrosion problems for the English power industry. A market for Apexior quickly developed here in the U.S. power industry. To fulfill this growing demand, a group of U.S. investors incorporated The Dampney Company of America in Boston, Massachusetts in 1917, manufacturing and marketing **Apexior** brand corrosion-resistant coatings under license from the English firm of J. Dampney and Co., Ltd.

Success in this demanding application in the U.S. power industry established Dampney's reputation as a pioneer in the field of corrosion control and inspired our corporate mission: to develop high-performance protective coatings for special exposures, operating conditions, and end uses. Dampney's **Thurmalox**® coatings exemplify our commitment to solving industry's most extreme coating problems. Our Thurmalox line offers solutions for harsh environments including extreme temperatures, corrosion under insulation, high-build corrosion, hot water-side corrosion, and in-service hot equipment applications.

TODAY'S TECHNOLOGY

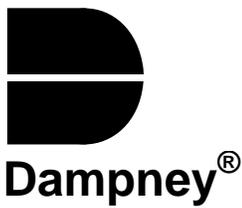
Dampney continues to develop and improve industry's choice of innovative, right-the-first-time coating systems for protection against hostile environments in atmospheric, immersion, and underground applications. Coating systems are based on a broad range of polymers and pigments resistant to chemicals, extreme heat and weather. Individual coatings and systems are tailored for application to masonry, metal, plastic, and wooden surfaces.

PRODUCT LINES

Our primary product lines include:

- **THURMALOX** High Temperature Industrial Protective Coatings - for metal structures subjected to high temperatures and corrosive environments.
- **THURMALOX** High Temperature Protective Coatings for the OEM Market - for metal products and applications subjected to high temperatures and various environments.
- **EPODUR**® 100% Solid Novolac Systems - for secondary containment, flooring and concrete restorations.
- **APEXIOR** Protective Coatings - for water-side corrosion prevention of steam generating equipment and auxiliaries.
- **PROTEXIOR**® A high performance epoxy, VOC compliant coating formulated to resist a wide range of acids, oils, and chemicals.
- **DYMACRYL**® Water Repellent Masonry Stains - for concrete and masonry surfaces.
- **ELASTOID**® High Build Elastomeric Rubber Coatings.
- **ENDCOR**® Corrosion Resistant Coatings - for general industrial maintenance.
- **EPODUR**® High Solids Epoxy Coatings - for long-term, heavy duty protection in aggressive chemical, industrial, and marine environments.

Dampney's coating application news articles have appeared in leading technical publications, including: *American Painting Contractor*, *Chemical Engineering*, *Chemical Processing*, *Journal of Protective Coatings and Linings*, *Plant Engineering*, *Plant Services*, *Gas Industries*, and others.



Protective Coatings

Case histories describing the application of our coating systems under demanding or unusual service conditions are available, as well as a partial client list of engineering and construction firms who specified these products, and refining, chemical processing and utility corporations who use these protective coatings.

Dampney supports the leading technical and trade associations serving the protective coating and paint industries, and is a member of the National Paint and Coatings Association (NPCA), Canadian Paint and Coating Association (CPCA), National Association of Corrosion Engineers (NACE), and Steel Structures Painting Council (SSPC).

MANUFACTURING CAPABILITIES

Continuous modernization and expansion of our Everett, Massachusetts plant gives us the manufacturing flexibility and capacity to meet increased demand for standard and custom coatings, and the ability to produce new and innovative coating systems. Our state-of-the-art manufacturing processes include a computer controlled formula maintenance, batch production, and inventory control system, as well as a computer controlled color matching system.

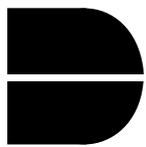
As a result of our capital investments, we have optimized our cost control, production efficiency and quality assurance programs.

PRODUCT DEVELOPMENT

Our well-equipped product laboratory enables us to develop new and better coatings to meet industry's ever changing needs. We adhere to strict manufacturing quality control standards, and with our testing facilities, we help solve customers' coating and corrosion problems and carefully evaluate existing and new protective coatings, systems and raw materials.

TECHNICAL SERVICES

Dampney provides quality coating products tailored to each customer's requirements, backed by technical service to ensure the coating's most effective use. Our protective coating technical service entails making a comprehensive survey; analyzing the results and making recommendations; providing laboratory services, surface preparation and application guidance; as well as field inspection and periodic follow-up after project completion. Dampney's technical service assures maximum protection at the lowest total cost.



Dampney®

Protective Coatings

DAMPNEY CLIENT LIST

REFINING AND CHEMICAL

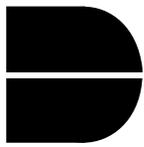
Air Products and Chemicals	Formosa Plastic
Amerada Hess Corporation	Hoechst Celanese Corporation
BASF Corporation	Huntsman Chemical Corp.
BP (Amoco, Arco) Refining	Lyondell Petrochemical Corp.
C.F. Industries	Marathon Ashland Oil Co.
Chevron U.S.A.	Monsanto Company
Citgo Petroleum Corporation	Murphy Oil Corporation
Conoco, Inc.	Phillips Petroleum Company (Tosco)
CYTEC Industries	Rubicon, Inc.
Dow Chemical U.S.A.	Shell Refining & Marketing Company
E.I. Dupont de Nemours & Company	Star Enterprise (Texaco- Shell)
Elf Atochem North America	Texaco Inc.
Equistar	Ultramar Diamond Shamrock
Exxon Mobil	Valero Refining & Marketing

ENGINEERING AND CONSTRUCTORS

ABB Lummus Global	KTA-TATOR
Anderson 2000	Kvaerner
Bechtel, Inc.	Lockwood Greene, Inc.
Black & Veatch	Parsons Corp.
Burns & McDonnell	Raytheon Engineers & Constructors
Fluor Daniel Inc.	S.G. Pinney & Associates
Ford, Bacon & Davis Companies, Inc.	Stone & Webster Incorporated
Foster Wheeler Corporation	Sumitomo Heavy Industries Limited
Jacobs Engineering Group	Washington Group (Raytheon)
Kellogg Brown & Root	

INDUSTRIAL AND UTILITY

Alabama Power Company	Holcium Cement
Allied Signal	Inland Steel Company
Aluminum Co. of America	Michigan Consolidated Gas Company
Anheuser-Busch Companies, Inc.	Pacific Gas & Electric Company
Ashgrove Cement	Southern Company
Bethlehem Steel Corporation	Teledyne Rodney Metals
Commonwealth Edison Co.	U.S. Sugar
Consolidated Edison Company	USX Corporation
Florida Power Co.	Siemens (Westinghouse Electric)
General Dynamics Corporation	Wheelabrator, Inc.
General Electric Power Group	
Georgia Power	

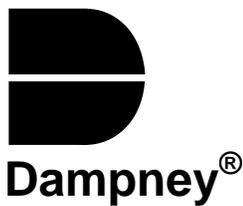


Dampney®

Protective Coatings

Dampney Product Selection Guide

Product / System	Apexior® No. 1 / 1C	Apexior No. 3 / 3C	Protexior® 794	Protexior 795
Generic Type	Organic	Organic	Epoxy	Epoxy
Color	Black	Black	Black	Red
Common Uses	Boiling Water/ Steam Exposure/ Immersion	Fresh/Salt Water Exposure/ Immersion	Tanks, Piping, Air Handling Equipment and Concrete Containment	Tanks, Piping, Air Handling Equipment and Concrete Containment
Service Conditions				
Temperature Resistance	200°F to 700°F (93°C to 371°C) (Wet Only)	Ambient to 140°F (60°C)	Ambient to 350°F (177°C) (Dry) 200°F (93°C)(Wet)	Ambient to 350°F (177°C) (Dry) 200°F (93°C)(Wet)
Continuous Temperature	700°F (371°C) (Wet only)	Ambient to 140°F (60°C)	350°F (177°C) Dry	350°F (177°C) Dry
Intermittent Temperature	700°F (371°C) (Wet only)	Ambient to 140°F (60°C)		
Immersion	Yes	Yes	Yes	Yes
Insulated	N/A	N/A	Yes	Yes
Un-insulated Surfaces	N/A	N/A	Yes	Yes
Surface Preparation	SSPC-SP 10	SSPC-SP 10	See Bulletin	SSPC-SP 10
Substrate	Carbon Steel	Carbon Steel	Steel, Galvanized, Aluminum, Concrete/Masonry	Steel, Galvanized, Aluminum
Application				
Components	1	1	2	2
Volume Solids	34%	47% / 50%	60%	60%
Number of Coats	2	2	1	1
DFT/ Coat mils (microns)	3.5 - 4.0 (87 - 100)	3.5 - 4.0 (87 - 100)	4.0 - 6.0 (100-150)	4.0 - 6.0 (100-150)
WFT/ Coat mils (microns)	9.0 -12.0 (225 - 300)	7 - 9 / 7-8 (175-225/ 175-200)	6.6 - 10.0 (165 - 250)	6.6 - 10.0 (165 - 250)
Coverage @1mil/gal (@ 25 micron/liter)	550 sq. ft. (13 sq. m)	758 / 800 sq. ft. (18 / 19 sq. m)	962 sq. ft.	962 sq. ft.
Application Temperature	50°F - 120°F (10°C - 49°C)	50°F - 120°F (10°C - 49°C)	50°F - 100°F (10°C - 38°C)	50°F - 100°F (10°C - 38°C)
Dry/Touch 70°F (21°C)	6 - 8 hrs	16 - 24 hrs	12 hrs	12 hrs
Dry/Recoat 70°F (21°C)	16 - 24 hrs	16 - 24 hrs	12 hrs	12 hrs
Dry/Ship 70°F (21°C)	7 days	7 days	24-36 hrs	24-36 hrs
VOC Content	4.4 /3.5 lb./gal. (527 / 420 g/L)	3.44 / 2.7lb./gal. (413 / 324 g/L)	0.75lbs/gal	1.04lbs/gal



Protective Coatings

Dampney Product Selection Guide

Product / System	Thurmalox [®] 70 / 70C	Thurmalox 200 / 200C	Thurmalox 210 / 210C	Thurmalox 218 / 219
Generic Type	Silicone	Modified Silicone	Modified Silicone / Zinc Dust Primer	Polymeric Coating Primer/Topcoat
Color	Black	Colors	Dark Gray	Lt. Gray / Black
Common Uses	Stress Corrosion Cracking For Stainless Steel	Exterior Exposure in Colors to 500°F(260°C)	Primer for 200, Un-insulated Surfaces	Cyclic, Insulated Steel, Ambient & Hot Apply
Service Conditions				
Temperature Resistance	Ambient to 1000°F / 1000°F (538°C / 538°C)	Ambient to 500°F (260°C)	Ambient to 500°F (260°C)	Ambient to 450°F (232°C)
Continuous Temp.	1000°F / 1000°F (538°C / 538°C)	500°F (260°C)	500°F (260°C)	450°F (232°C)
Intermittent Temp.	1100°F / 1100°F (593°C / 593°C)	500°F (260°C)	500°F (260°C)	450°F (232°C)
Immersion	No	No	No	Yes
Insulated	Yes	No	No	Yes
Un-insulated Surfaces	No	Yes	Yes	Yes w/Topcoat
Surface Preparation	SSPC-SP 1	SSPC-SP 10	SSPC-SP 10	SSPC-SP 10
Substrate	Stainless Steel	Carbon or Stainless	Carbon Steel	Carbon Steel
Application				
Components	1	1	2	2 Ratio = 4:1 / 2:1
Volume Solids	18% / 18%	41% / 42%	30% / 30%	61% / 58%
Number of Coats	2	1	1	1 of each
DFT/ Coat mils (microns)	1.5 - 2.0 (37 - 50)	2.0 - 2.5 (50 - 62)	2.0 - 2.5 (50 - 62)	5.0 - 6.0 (125 - 150)
WFT/ Coat mils (microns)	8.0-11 / 8.0 - 11 (200-275 / 200-275)	4.5 - 5.5 (112 - 137)	6-8 / 6-8 (150-200 / 150-200)	8.0 - 10.0 (200 - 250)
Coverage @ 1 mil/gal. (@ 25 micron/liter)	287 / 290 sq. ft. (6.8 / 6.8 sq. m)	659 / 658 sq. ft. (16 sq. m)	480 / 481 sq. ft. (11 sq. m)	1000 / 937 sq. ft. (24 / 22 sq. m)
Application Temp.	50°F - 120°F (10°C - 49°C)	50°F - 120°F (10°C - 49°C)	50°F - 120°F (10°C - 49°C)	50°F - 350°F (10°C - 176°C)
Dry/Touch 70°F (21°C)	30 mins / 8 hrs	1 - 2 hrs	2 - 3 / 1 - 2 hrs	2 hours
Dry/Recoat 70°F (21°C)	8 hrs / 12 hrs	8 hrs / 8 - 10 hrs	8 hours	4 hours
Dry/Ship 70°F (21°C)	24 hrs / 48 hrs	24 hrs / 48 hrs	24 hours	24 hours
VOC Content	5.96 / 3.45 lb./gal. (715 / 413 g/L)	4.35 / 3.45 lb./gal. (522 / 410 g/L)	4.9 / 3.2 lb./gal. (587 / 384 g/L)	2.5 / 2.8 lb./gal. (300 / 336 g/L)



Dampney®

Protective Coatings

Dampney Product Selection Guide

Product / System	Thurmalox® 225HD	Thurmalox 230 / 230C	Thurmalox 240	Thurmalox 242-02 / 242C-02
Generic Type	Modified Silicone Primer/Topcoat	Silicone Topcoat	Silicone-Ceramic	Silicone-Ceramic
Color	Gray	Colors	Colors **	Black
Common Uses	High Build, High Temperature Ambient & Hot Apply	Exterior surfaces available in stock & custom colors	Rapid Thermal Cycling	Rapid Thermal Cycling
Service Conditions				
Temperature Resistance	350°F - 1000°F (176°C - 538°C)	500°F - 1000°F (260°C - 538°C)	1100°F - 1600°F (593°C - 871°C)	1000°F - 1600°F (538°C - 871°C)
Continuous Temperature	1000°F (538°C)	1000°F (538°C)	1400°F (760°C)	1000°F (538°C)
Intermittent Temperature	1200°F (649°C)	1200°F (649°C)	1600°F (871°C)	1400°F / 1600°F (760°C / 871°C)
Immersion	No	No	No	No
Insulated	Yes	No	No	No
Un-Insulated Surfaces	Yes w/ Topcoat	Yes	Yes	Yes
Surface Preparation	SSPC-SP 10	SSPC-SP 10	SSPC-SP 10	SSPC-SP 10
Substrate	Carbon or Stainless	Carbon or Stainless	Carbon or Stainless	Carbon or Stainless
Application				
Components	2	1	1	1
Volume Solids	46%	20% / 56%	42%	43% / 45%
Number of Coats	1 or 2	1	2	2
DFT/ Coat mils (microns)	4.0 - 5.0 (100 - 125)	1.5 - 2.0 (37 - 50)	1.5 - 2.0 (37 - 50)	1.5 - 2.0 (37 - 50)
WFT/ Coat mils (microns)	8.0 - 11 (200 - 275)	7.5 - 10.0 / 2.5 - 3.5 (187-250 / 62-87)	3.0 - 5.0 (75 - 125)	4.0 - 5.0 (100 - 125)
Coverage @ 1 mil/gal. (@ 25 micron/liter)	740 sq. ft. (17.5 sq. m)	320 / 900 sq. ft. (8 / 22 sq. m)	620 sq. ft. (14.6 sq. m)	700 / 720 sq. ft. (17 / 17 sq. m)
Application Temperature	50°F - 350°F (10°C - 176°C)	50°F - 120°F (10°C - 49°C)	50°F - 120°F (10°C - 49°C)	50°F - 120°F (10°C - 49°C)
Dry/Touch 70°F (21°C)	4 hours Catalyzed	30 mins / 6-8 hours	30 minutes	30 minutes
Dry/Recoat 70°F (21°C)	24 hours Catalyzed	8 hrs / 10-12 hours	8 hours	8 hours
Dry/Ship 70°F (21°C)	72 hours	24 hrs / 48 hours	24 hours	24 hours
VOC Content	3.8 lb./gal. (456 g/L)	5.4 / 3.1 lb./gal. (647 / 371 g/L)	4.2 lb./gal. (504 g/L)	4.0 / 2.5 lb./gal. (479 / 300 g/L)

** Consult Dampney for Available Colors



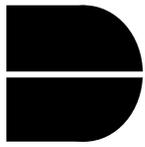
Protective Coatings

Dampney Product Selection Guide

Product / System	Thurmalox® 245 / 245C	Thurmalox 260 / 260C	Thurmalox 260C TIC	Thurmalox 280 / 280C
Generic Type	Silicone Zinc Dust	Silicone Copolymer	Silicone	Silicone
Color	Dark Gray	Colors	Yellow, Blue	Aluminum
Common Uses	Primer for 230	Hot Applied to 500°F (260°C)	Temperature Indicating 500°F and 600°F (260°C and 316°C)	Exterior Exposure to 1200°F (649°C)
Service Conditions				
Temperature Resistance	500°F - 1000°F (260°C – 538°C)	Ambient to 500°F (260°C)	Ambient to 500°F (260°C)	Ambient to 1200°F (649°C)
Continuous Temperature	1000°F (538°C)	500°F (260°C)	500°F (260°C)	1200°F (649°C)
Intermittent Temperature	1200°F (649°C)	600°F (316°C) / 500°F (260°C)	600°F (316°C)	1200°F (649°C)
Immersion	No	No	No	No
Insulated	No	No	No	No
Un-insulated Surfaces	Yes	Yes	Yes	Yes
Surface Preparation	SSPC-SP 10	SSPC-SP 10	SSPC-SP 10	SSPC-SP 10
Substrate	Carbon Steel	Carbon or Stainless	Carbon or Stainless	Carbon Steel
Application				
Components	2	1	1	1
Volume Solids	33% / 50%	52% / 52%	Average 52%	25% / 32%
Number of Coats	1	2	2	1
DFT/ Coat mils (microns)	1.5 - 2.0 (37 - 50)	2.0 - 2.5 (50 - 62)	2.0 - 2.5 (50 - 62)	1.5 - 2.0 (37 - 50)
WFT/ Coat mils (microns)	4.5 - 6.0 / 3.0 - 4.0 (112-150 / 75-100)	4.0 - 5.0 / 3.5 - 4.0 (100-125 / 87-100)	3.5 - 4.0 (87 - 100)	6.0-8.0/4.0-6.0 (150-200)(110-150)
Coverage @ 1 mil/gal. (@ 25 micron/liter)	530 / 820 sq. ft. (13 / 20 sq. m)	834 / 834 sq. ft. (20 / 20 sq. m)	786 sq. ft. (19 sq. m)	401 / 510 sq. ft. (9.6 / 12 sq. m)
Application Temperature	50°F – 120°F (10°C – 49°C)	50°F – 500°F (10°C – 260°C)	50°F - 500°F (10°C - 260°C)	50°F - 120°F (10°C - 49°C)
Dry/Touch 70°F (21°C)	30 mins / 6-8 hrs	4 - 6 hours / 7 hours	6 - 8 hours	30 minutes
Dry/Recoat 70°F (21°C)	8 hrs / 10-12 hrs	8 - 10 hours / 11 hours	10 - 12 hours	8 hours
Dry/Ship 70°F (21°C)	24 hrs / 48 hrs	48 hours	48 hours	24 hours
VOC Content	4.9 / 3.33 lb./gal. (588 / 399 g/L)	3.3 / 3.2 lb./gal. (399 / 384 g/L)	3.2 lb./gal. (384 g/L)	5.3 / 3.3 lb./gal. (630 / 396 g/L)

Dampney Product Selection Guide

Product / System	Thurmalox [®] 2600	Thurmalox 2655
Generic Type	Silicone	Silicone
Color	Off White, Lt. Gray	Oxide Red
Common Uses	Bag House and Pollution Equipment Coating	Sealant
Service Conditions		
Temperature Resistance	600°F (316°C)	550°F (288°C)
Continuous Temperature	600°F (316°C)	-80°F - 550°F (-62°C - 260°C)
Intermittent Temperature	600°F (316°C)	650°F (343°C)
Immersion	No	No
Insulated	N/A	N/A
Un-insulated Surfaces	Yes	Yes
Surface Preparation	SSPC-SP 10	Clean Surface
Substrate	Carbon Steel	Carbon or Stainless
Application		
Components	1	1
Volume Solids	56%	100%
Number of Coats	3	1
DFT/ Coat mils (microns)	4.0 - 5.0 (100 - 125)	1/8 inch
WFT/ Coat mils (microns)	7.0 - 9.0 (175 - 225)	----- ---
Coverage @ 1 mil/gal. (@ 25 micron/liter)	898 sq. ft. (22 sq. m)	----- ---
Application Temperature	50°F - 120°F (10°C - 49°C)	50°F - 120°F (10°C - 49°C)
Dry/Touch 70°F (21°C)	6 - 8 hours	25 - 35 min
Dry/Recoat 70°F (21°C)	10 - 12 hours	20 - 25 min
Dry/Ship 70°F (21°C)	48 hours	20 - 30 hours
VOC Content	3.5 lb./gal. (420 g/L)	----- ---



Dampney

Protective Coatings

Apexior® Number 1® Single Component Air Dry Coating Wet Heat Resistance from 200°F - 700°F Immersion of Boiling Water/Steam

Description

Apexior Number 1 is a single component, easy to apply air dry coating specifically formulated for the hot water-side corrosion prevention of metal surfaces. It is a coating that excels in severe thermal cyclic immersion service. Apexior Number 1 is resistant to continuous immersion in boiling water and steam from 200°F (93°C) to 700°F (371°C). It aids in the reduction and prevention of tight bonding of hard scale and allows for easy cleaning and removal of any scale buildup in steam generating equipment. Apexior Number 1 prevents pitting corrosion and stops corrosion that has already begun - except for badly pitted areas. It has outstanding wetting properties and adheres well to power tooled cleaned areas. Equipment coated with Apexior Number 1 will also see an increase in heat transfer efficiency. Apexior Number 1 performs ideally with water treatment in steam generating equipment.

Recommended Uses

Apexior Number 1 protects hot water-side surfaces of:

- Steam generating equipment
- Hot condensate return tanks
- De-aerators
- Hot process tanks
- Autoclaves, sterilizing equipment
- Heat recovery system
- Mud and steam drums
- Steam traps

Features

- Air dries, easy to apply
- Excellent wettability properties
- Easily re-coatable
- Resistant to boiling water/steam to 700°F
- Increases heat transfer efficiency
- Outstanding resistance to thermal shock (immersion)
- Inert to water treatment
- Prevents corrosion in standby service
- Prevents scale buildup
- Surface tolerant features

Not Recommended For

- Hot water tank service with average operating temperature below 200°F (93°C)
- Immersion in solvents or acids
- Interior of boilers held for long periods in cold, wet layup or standby service

Surface Preparation - 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-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5 - 2.0 mils. 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-SP 6, including the desired surface profile (anchor pattern).

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.

Bulletin Apexior Number 1

Application Guidelines - Carbon Steel

Apply first coat of Apexior Number 1 at 3.5–4.0 mils DFT. Allow to dry 6 to 8 hours before applying second coat at 3.5-4.0 mils DFT. Follow dry time instruction before placing in service.

Surface temperature must be at least 5°F (3°C) above dew point.

Primer: Apexior Number 1	3.5-4.0 mils (87-100 microns)
Topcoat: Apexior Number 1	3.5-4.0 mils (87-100 microns)
Total dry film thickness	7.0-8.0 mils (175-200 microns)

Application Equipment

Apexior Number 1 may be applied by conventional spray, airless spray, or brush. Do not apply Apexior Number 1 in heavier films than specified since blistering may occur. During application of Apexior Number 1 ventilate area with high volume of air.

Conventional Spray:

Spray gun	Binks 95
Air hose	1/4" nps(m)
Fluid hose	3/8" nps(m)
Air nozzle	67PB
Fluid nozzle	67SS
Orifice size	.086
Atomizing pressure	35-40 lb.
Pot pressure	10-15 lb.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips*	163-610, 163-315
Pump	Graco Bulldog 30:1
Fluid hose	3/8" to 1/2" ID
Air pressure to pump	100 psi
Pump operating pressure	80-90 psi

* Use Reverse-A-Clean® tips for fast, easy clean out.

Brush: Do not use synthetic bristle brushes. Using the side of the brush, scoop Apexior Number 1 from the container and apply in sweeping strokes, overlapping the brush strokes. Do not attempt to remove brush marks.

Thinning

Only thin Apexior Number 1 with Dampney 105 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

Apexior Number 1 will air dry in 16 to 24 hours. Allow equipment to air dry for 7 days before placing equipment into service. Ventilate the area with a high volume of air until there is little or no odor of solvent remaining. Coating must be free of solvents prior to being placed into service. Begin ventilation of area during application of Apexior Number 1. A water immersion temperature of 200°F (93°C) must be achieved for the coating system to withstand water temperature below 200°F (93°C).

Cleanup

Thoroughly flush spray equipment and hoses immediately after use with Dampney 105 Thinner. Dismantle spray equipment and clean parts, brushes and rollers with Dampney 105 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: Combustible 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 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

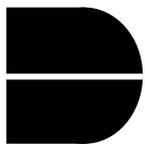
TECHNICAL DATA

Characteristics	Apexior Number 1
Generic Type	Organic
Color	Black
Temperature resistance (wet only)	
Continuous	700°F (371°C) boiling water/steam
Percent (%) Solids by volume	34
Dry film thickness per coat	3.5 - 4.0 mils (87 - 100 microns)
Wet film thickness per coat	9.0 - 12.0 mils (225 - 300 microns)
Theoretical coverage	550 mil. sq. ft. per gallon
	13.2 sq. m. @ 25 microns per liter
Application temp. @ 50% RH	50°F - 120°F (10°C - 50°C)
Drying time @ 50% RH	70°F (21°C)
To touch	6 - 8 hours
To recoat	16 - 24 hours
*Full cure @ 70°F (21°C)	7 days
Weight per gallon	
Apexior Number 1	8.8 lb. (4.0 kg)
Dampney 105 Thinner	6.5 lb. (2.9 kg)
Flash point	110°F (43°C)
Pot life	N/A
Shelf life	1 year
Volatile organic compounds	4.4 lb./gal. (527 g/L)

* A water immersion temperature of 200°F (93°C) must be achieved for the coating system to withstand water temperature below 200°F (93°C).

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**.



Dampney

Protective Coatings

Apexior® Number 1C VOC Compliant Single Component Air Dry Coating Wet Heat Resistance from 200°F - 700°F Immersion of Boiling Water/Steam

Description

Apexior Number 1C is a VOC compliant, single component, easy to apply air dry coating specifically formulated for the hot water-side corrosion prevention of metal surfaces. It is a coating that excels in severe thermal cyclic immersion service. Apexior Number 1C is resistant to continuous immersion in boiling water and steam from 200°F to 700°F (371°C). It aids in the reduction and prevention of tight bonding of hard scale and allows for easy cleaning and removal of any scale buildup in steam generating equipment. Apexior Number 1C prevents pitting corrosion and stops corrosion that has already begun - except for badly pitted areas. It has outstanding wetting properties and adheres well to power tooled cleaned areas. Equipment coated with Apexior Number 1C will also see an increase in heat transfer efficiency. Apexior Number 1C performs ideally with water treatment in steam generating equipment.

Recommended Uses

Apexior Number 1C protects hot water-side surfaces of:

- Steam generating equipment
- Hot condensate return tanks
- De-aerators
- Hot process tanks
- Autoclaves, sterilizing equipment
- Heat recovery system
- Mud and steam drums
- Steam traps

Features

- VOC compliant
- Air dries, easy to apply
- Excellent wettability properties
- Easily re-coatable
- Resistant to boiling water/steam to 700°F
- Increases heat transfer efficiency
- Outstanding resistance to thermal shock (immersion)
- Inert to water treatment
- Prevents corrosion in standby service

- Prevents scale buildup
- Surface tolerant features

Not Recommended For

- Hot water tank service with average operating temperature below 200°F (93°C)
- Immersion in solvents or acids
- Interior of boilers held for long periods in cold, wet layup or standby service

Surface Preparation - 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-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5 - 2.0 mils. 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-SP 6, including the desired surface profile (anchor pattern).

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.

Bulletin Apexior Number 1C

Application Guidelines - Carbon Steel

Apply first coat of Apexior Number 1C at 3.5–4.0 mils DFT. Allow to dry 6 to 8 hours before applying second coat at 3.5-4.0 mils DFT. Follow dry time instruction before placing in service.

Surface temperature must be at least 5°F (3°C) above dew point.

Primer: Apexior Number 1C 3.5-4.0 mils
(87-100 microns)

Topcoat: Apexior Number 1C 3.5-4.0 mils
(87-100 microns)

Total dry film thickness 7.0-8.0 mils
(175-200 microns)

Application Equipment

Apexior Number 1C may be applied by conventional spray, airless spray, or brush. Do not apply Apexior Number 1C in heavier films than specified since blistering may occur. During application of Apexior Number 1C ventilate area with high volume of air.

Conventional Spray:

Spray gun	Binks 95
Air hose	1/4" nps(m)
Fluid hose	3/8" nps(m)
Air nozzle	67PB
Fluid nozzle	67SS
Orifice size	.086
Atomizing pressure	35-40 lbs
Pot pressure	10-15 lbs

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips*	163-610, 163-315
Pump	Graco Bulldog 30:1
Fluid hose	3/8" to 1/2" ID
Air pressure to pump	100 psi
Pump operating pressure	80-90 psi

* Use Reverse-A-Clean® tips for fast, easy clean out.

Brush:

Do not use synthetic bristle brushes. Using the side of the brush, scoop Apexior Number 1C from the container and apply in sweeping strokes, overlapping the brush strokes. Do not attempt to remove brush marks.

Thinning

Only thin Apexior Number 1C with Dampney 180 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

Apexior Number 1C will air dry in 16-24 hours. Allow equipment to air dry for 7 days before placing equipment into service. Ventilate the area with a high volume of air until there is little or no odor of solvent remaining. Coating must be free of solvents prior to being placed into service. Begin ventilation of area during application of Apexior Number 1C. A water immersion temperature of 200°F (93°C) must be achieved for the coating system to withstand water temperature below 200°F (93°C).

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 a 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: Combustible 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 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

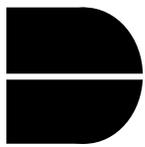
TECHNICAL DATA

Characteristics	Apexior Number 1C
Generic Type	Organic
Color	Black
Temperature resistance (wet only)	
Continuous	700°F (371°C) boiling water/steam
Percent (%) Solids by volume	34
Dry film thickness per coat	3.5 - 4.0 mils (87 - 100 microns)
Wet film thickness per coat	9.0 - 12.0 mils (225 - 300 microns)
Theoretical coverage	550 mil. sq. ft. per gallon
	13.2 sq. m. @ 25 microns per liter
Application temp. @ 50% RH	50°F-120°F (10°C-50°C)
Drying time @ 50% RH	70°F (21°C)
To touch	6 - 8 hours
To recoat	16 - 24 hours
*Full cure @ 70°F (21°C)	7 days
Weight per gallon	
Apexior Number 1C	10.2 lb (4.6 kg)
Dampney 180 Thinner	7.5 lb (3.4 kg)
Flash point	109°F (43°C)
Pot life	N/A
Shelf life	1 year
Volatile organic compounds	3.5 lb./gal. (419 g./l.)

* A water immersion temperature of 200°F (93°C) must be achieved for the coating system to withstand water temperature below 200°F (93°C).

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**.



Apexior® Number 3® Single Component Air Cure Coating Immersion in Fresh/Salt Water

Description

Apexior Number 3 is a single component, easy to apply air cure coating specifically formulated for the waterside corrosion prevention of metal surfaces. It has outstanding wetting properties and adheres well to power tooled cleaned areas. Apexior Number 3 is resistant to continuous immersion in fresh or salt water as well as frequently wet or high humidity environments. Apexior Number 3 prevents pitting corrosion and stops corrosion which has already begun - except for badly pitted areas. It aids in the reduction and prevention of tight bonding of hard scale and allows for easy cleaning and removal of scale buildup. Apexior Number 3 performs ideally with water treatment.

Recommended Uses

Apexior Number 3 protects the water-side surfaces of:

- Chillers
- Cold water storage tanks
- Condenser heads and shells
- Inside shell of AC units
- Pump casings on fresh/salt water intakes
- Inner housings of pumps
- Sump pump pits and chain lockers
- Bilge and forepeak tanks
- Ballast and brine tanks

Features

- Air dries, easy to apply
- Excellent wettability properties
- Resistant to fresh/salt water
- Easily re-coatable
- Surface tolerant features
- Inert to water treatment
- Prevents scale buildup

Not Recommended For

- Immersion in solvents or acids
- Water immersion service above 140°F (60°C)
- Potable water storage tanks

Surface Preparation - 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-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5 - 2.0 mils. 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-SP 6, including the desired surface profile.

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 - Carbon Steel

Surface temperature must be at least 5°F (3°C) above dew point.

Primer: Apexior Number 3	3.5-4.0 mils (87-100 microns)
Topcoat: Apexior Number 3	3.5-4.0 mils (87-100 microns)
<hr/>	
Total dry film thickness	7.0-8.0 mils (175-200 microns)

Application Equipment

Apexior Number 3 may be applied by airless spray or brush. Do not apply Apexior Number 3 in heavier films than specified since blistering may occur. During application of Apexior Number 3 ventilate area with high volume of air.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips*	163-610, 163-315
Pump	Graco Bulldog 30:1
Fluid hose	3/8" to 1/2" ID
Air pressure to pump	100 psi
Pump operating press.	80-90 psi

* Use Reverse-A-Clean® tips for fast, easy clean out.

Brush:

Do not use synthetic bristle brushes. Using the side of the brush, scoop Apexior Number 3 from the container and apply in sweeping strokes, overlapping the brush strokes. Do not attempt to remove brush marks.

Thinning

Only thin Apexior Number 3 with Dampney 105 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

Apexior Number 3 will air dry in 16-24 hours. Allow equipment to air dry for 7 days before placing equipment into service. Ventilate the area with a high volume of air until there is little or no odor of solvent remaining. Coating must be free of solvents prior to being placed into service. Begin ventilation of area during application of Apexior Number 3.

Cleanup

Thoroughly flush spray equipment and hoses immediately after use with Dampney 105 Thinner. Dismantle spray equipment and clean parts, brushes and rollers with Dampney 105 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 Material Safety Data Sheet (MSDS) for complete precautionary and disposal information.

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

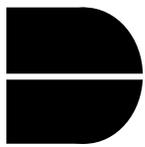
FOR INDUSTRIAL USE ONLY

TECHNICAL DATA

Characteristics	Apexior Number 3
Generic Type	Organic
Color	Black
Temperature resistance (wet only)	
Continuous	140°F (60°C)
Percent (%) Solids by volume	47
Dry film thickness per coat	3.5 - 4.0 mils (87 - 100 microns)
Wet film thickness per coat	7.0 - 9.0 mils (175 – 225 microns)
Theoretical coverage	758 mil. sq. ft. per gallon 18 sq. m. @ 25 microns per liter
Application temp. @ 50% RH	50°F-120°F (10°C-50°C)
Drying time @ 50% RH	70°F (21°C)
To touch	16-24 hours
To recoat	16-24 hours
Full cure @ 70°F (21°C)	7 days
Weight per gallon	
Apexior Number 3	7.4 lb (3.3 kg)
Dampney 105 Thinner	6.5 lb (2.9 kg)
Flash point	110°F (43°C)
Pot life	N/A
Shelf life	1 year
Volatile organic compounds	3.44 lb./gal. (413 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.**



Apexior® Number 3C VOC Compliant Single Component Air Cure Coating Immersion in Fresh/Salt Water

Description

Apexior Number 3C is a VOC compliant, single component, easy to apply air cure coating specifically formulated for the waterside corrosion prevention of metal surfaces. It has outstanding wetting properties and adheres well to power tooled cleaned areas. Apexior Number 3C is resistant to continuous immersion in fresh or salt water as well as frequently wet or high humidity environments. Apexior Number 3C prevents pitting corrosion and stops corrosion which has already begun - except for badly pitted areas. It aids in the reduction and prevention of tight bonding of hard scale and allows for easy cleaning and removal of scale buildup. Apexior Number 3C performs ideally with water treatment.

Recommended Uses

Apexior Number 3C protects the water-side surfaces of:

- Chillers
- Cold water storage tanks
- Condenser heads and shells
- Inside shell of AC units
- Pump casings on fresh/salt water intakes
- Inner housings of pumps
- Sump pump pits and chain lockers
- Bilge and forepeak tanks
- Ballast and brine tanks

Features

- VOC Compliant 2.8 lb/gal (335.5 g/L)
- Air dries, easy to apply
- Excellent wettability properties
- Resistant to fresh/salt water
- Easily re-coatable
- Surface tolerant features
- Inert to water treatment
- Prevents scale buildup

Not Recommended For

- Immersion in solvents or acids
- Water immersion service above 140°F (60°C)
- Potable water storage tanks

Surface Preparation - 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-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5 - 2.0 mils. 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-SP 6, including the desired surface profile.

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 - Carbon Steel

Surface temperature must be at least 5°F (3°C) above dew point.

Primer: Apexior Number 3C	3.5-4.0 mils (87-100 microns)
Topcoat: Apexior Number 3C	3.5-4.0 mils (87-100 microns)
<hr/>	
Total dry film thickness	7.0-8.0 mils (175-200 microns)

Bulletin Apexior Number 3C

Application Equipment

Apexior Number 3C may be applied by airless spray or brush. Do not apply Apexior Number 3C in heavier films than specified since blistering may occur. During application of Apexior Number 3C ventilate area with high volume of air.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips*	163-610, 163-315
Pump	Graco Bulldog 30:1
Fluid hose	3/8" to 1/2" ID
Air pressure to pump	100 psi
Pump operating press.	80-90 psi

* Use Reverse-A-Clean® tips for fast, easy clean out.

Brush:

Do not use synthetic bristle brushes. Using the side of the brush, scoop Apexior Number 3C from the container and apply in sweeping strokes, overlapping the brush strokes. Do not attempt to remove brush marks.

Thinning

Only thin Apexior Number 3C with Dampney 180 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

Apexior Number 3C will air dry in 16-24 hours. Allow equipment to air dry for 7 days before placing equipment into service. Ventilate the area with a high volume of air until there is little or no odor of solvent remaining. Coating must be free of solvents prior to being placed into service. Begin ventilation of area during application of Apexior Number 3C.

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 a 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 Material Safety Data Sheet (MSDS) for complete precautionary and disposal information.

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

KEEP OUT OF THE REACH OF CHILDREN

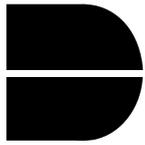
FOR INDUSTRIAL USE ONLY

WARRANTY

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TECHNICAL DATA

Characteristics	Apexior Number 3C
Generic Type	Organic
Color	Black
Temperature resistance (wet only) Continuous	Ambient - 140°F (60°C)
Percent (%) Solids by volume	50
Dry film thickness per coat	3.5 - 4.0 mils (87 - 100 microns)
Wet film thickness per coat	7.0 - 8.0 mils (175 – 200 microns)
Theoretical coverage	800 mil. sq. ft. per gallon
Application temp. @ 50% RH	19.6 sq. m. @ 25 microns per liter
Drying time @ 50% RH	50°F-120°F (10°C-50°C)
To touch	70°F (21°C)
To recoat	16-24 hours
Full cure @ 70°F (21°C)	16-24 hours
Weight per gallon	7 days
Apexior Number 3C	8.2 lb (3.7 kg)
Dampney 180 Thinner	7.5 lb (3.4 kg)
Flash point	110°F (43°C)
Pot life	N/A
Shelf life	1 year
Volatile organic compounds	2.8 lb./gal. (335.5 g./l.)



Dampney Protective Coatings

Protexior® 794 Chemical Resistance VOC Epoxy Finish

Description

A high performance voc compliant epoxy coating formulated to resist a wide range of acids, oils, and chemicals. Protexior 795/794 is used for the protection of both insulated and un-insulated surfaces with excellent resistance to wet/dry thermal cycling and boiling water.

Uses

Typical uses include

- Transformers and vessels
- Containment areas
- Valves, piping and pumps
- Ducts, Plenums and Bag-houses

Features

- Excellent chemical resistance
- Excellent resistance to acids
- Easy mixing
- Can be applied by brush, roller or spray
- Will with stand temperatures up to 350°F
- Excellent abrasion resistance

Primer Required

Steel: Apply over properly prepared surfaces and primed with Protexior 795 Primer, followed by an application of Protexior 794 Finish. See product bulletin 795 Primer for surface preparation and application details.

Concrete: Apply over properly prepared surfaces and primed with Protexior 793 primer/sealer/damp-proofing. See product Bulletin 793 primer/sealer/damp-proofing for surface preparation and application details.

Galvanized or Aluminum: Apply over properly prepared surfaces and etch with Endcor 450 Rust Rinse to etch. See product Bulletin 450 Rust Rinse for surface preparation and application details.

Surface Preparation

Prepare surfaces by methods suitable for exposures and service conditions. If priming is required follow instructions in appropriate Dampney primer bulletin.

Surface must be clean, dry and free from oil, grease, tar salts, efflorescence, chalk, loose paint, form oils,

release agents, curing compounds, loose mortar, rust, corrosion products, mill scale, or other foreign matter.

Steel: Apply over properly prepared surfaces and primed with Protexior 795 Primer. See product bulletin 795 Primer for surface preparation and application details.

Galvanized or Aluminum Surfaces: Degrease all surfaces, followed by preparing all surface with a solution of Endcor 450 Rust Rinse, allow to stand on surface for 10 to 15 minutes then rinse surface with clean fresh water.

Concrete and Masonry Surfaces;

Apply over properly prepared concrete and masonry surfaces. Apply a coat of Protexior 793 Primer/Sealer/Damp-Proofing following instructions stated in the Protexior 793 Bulletin.

Surface Preparation

Prepare surface by methods suitable for exposure and service conditions. If priming is required follow instructions for appropriate Dampney primer bulletin. Surfaces must be clean, dry and free from oil, grease, tar, salts, efflorescence, chalk, loose paint, form oils, release agents, curing compounds, loose mortar, rust, corrosion products, mill scale, or other foreign matter.

Steel: Remove all oils, grease or other foreign matter by following SSPC-SP 1 "Solvent Cleaning Standard" using Dampney 170 Cleaning Solvent prepare the surfaces before sandblasting. Follow surface preparation instruction for Protexior 795 Primer.

Galvanized or Aluminum Surfaces: After completion of preliminary surface preparation work. Wash all surfaces with Endcor 450 Rust Rinse, following mixing instructions. Allow this mixture to set on surfaces for 10 to 15 minutes then rinse with clean fresh water. Allow all surfaces to dry completely before application Protexior 795 Primer and Protexior 794 Finish.

Concrete and Masonry: Remove any oil or grease by methods described above, per SSPC SP 1 "Solvent Cleaning". Allow new concrete to cure for 28 days under normal conditions before application of coatings. After removal of other contaminants. Do not apply coatings to concrete treated with curing compounds unless test patch indicates satisfactory adhesion.

Mixing

Mixing ratio is five (5) Parts A (base) to (1) one part B (activator) by volume. Mix components separately then combine and mix thoroughly with an air driven explosion-proof power mixer until uniformly blended. Do not mix more material than can be used during the pot life period.

Thinning

Formulated for use as supplied. Do not thin.

Pot Life

Pot life is 4 hours at 75°F (23.9°C) and 50%RH. Pot life will vary with temperature and decreases as temperature increases. For limitations see "Physical Properties" section. Do not apply coating that has aged beyond the pot life as spraying characteristics and film integrity may be impaired.

Application Guidelines

Apply by conventional or airless spray, brush or roller. The following equipment or equivalent may be used.

Airless Spray:

Pump	Graco Bulldog 30:1 or higher
Gun	Graco 000-000
Fluid Tips*	Graco 615 to 621
Fluid hose	3/8" to 1/2" ID
Air pressure to pump	100 psi
Pump pressure	80-90 psi

* Use Reverse-A-Clean tips for fast, easy clean out. Do not apply by "hot" airless spray as heating shortens pot life.

Conventional Spray:

Spray gun	DeVilbiss JGA-402
Fluid Tip	EF
Air cap	704
Atomizing pressure	60 psi
Fluid pressure	25 psi
Air hose*	3/8" ID

Provide pressure pot with agitator, regulators for fluid and air pressure, and oil and moisture trap in air supply.

*Smaller hose diameter or length over 25 ft. may require increased pressure.

Brush: Use only pure bristle brushes

Roller: Use only solvent resistant rollers. Keep roller saturated to obtain correct film thickness. Do not squeegee coating or apply excessive pressure. Cross roll for uniform coverage.

Application Temperatures

To prevent moisture condensation, do not apply primer or finish coat unless surface temperature is 5°F (3°C)

Bulletin 794

above the dew point. Coating will not cure below the minimum surface temperature.

Curing time

Dries set-to-touch in 12 hours at 75°F (23.9°C) and 50%RH. Final curing time will depend upon film thickness, ventilation, temperature and relative humidity. See Physical Properties section for limitations.

Storage

Store in a dry place with temperature between 40-85°F (4.4-29.4°C).

Cleanup

Thoroughly flush spray equipment and hoses immediately after use with Dampney 100 Thinner. Dismantle spray equipment. Clean parts, brushes and rollers with Dampney 100 Thinner.

Shipping Weights

	1-Gal. Kit	5-Gal.Kit
Protexior 794 A	15.5 lbs	77.5 lbs.
Protexior 794 B	1.5 lbs.	7.5 lbs.
	1-Gal	5-Gal
Dampney 124	8 lbs	40 lbs

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 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 Sheets (MSDS) for complete precautionary and disposal information.

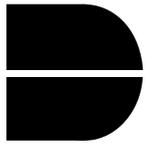
If instructions and warnings cannot be strictly followed, do not use this product.

FOR INDUSTRIAL USE ONLY

Technical Data

Property	Protexior 794		
Generic Type	Epoxy		
Color	Black and Gray		
Finish	Flat		
Number of Components	Two (2)		
Mixing Ratio by Volume (Mixed)	5 parts (A) to 1 part (B)		
Weight per gallon (Mixed)	16.6 lbs per gallon		
Viscosity (Mixed)	93-95 Krebs Units @ 75°F		
Percent solids by volume (Mixed)	60± 2%		
Temperature Resistance			
Continuous	350°F (177°C)		
Dry Film Thickness per coat	4.0 to 5.0 mils		
Wet Film thickness per coat	6.6 to 8.3 mils		
Theoretical coverage per gallon	962 sq. ft. @ 1 mil		
Application Temperature	Normal	Minimum	Maximum
Ambient Air	65-85°F(18-29°C)	50°F(10°C)	100°F(38°C)
Substrate	65-85°F(18-29°C)	50°F(10°C)	100°F(38°C)
Coating Material	65-85°F(18-29°C)	50°F(10°C)	100°F(38°C)
Humidity	20-75%	0%	85%
Drying Time at 75°F(23.9°C)			
To Touch	12 hrs		
To Recoat	12 to 14 hrs		
Maximum Recoat Time			
Final Cure	7 days at 75°F (23.9°C)		
Non-immersion	7 days at 75°F (23.9°C)		
Immersion service	7 days at 75°F (23.9°C)		
Pot Life	4 hrs		
Flash Point			
Part A (Base)	-4°F (-20°C)		
Part B (Activator)	40°F (4°C)		
Shelf Life	1 Year		
VOC (Volatile Organic Compound)	0.75lbs/gal		

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Protexior 795 Chemical Resistance VOC Primer

Description

A two-component, general purpose, high performance VOC compliant primer for service in moderate to severe chemical and corrosion exposures.

Protexior 795 Primer is the primer for Protexior 794 Chemical resistant finish systems.

Uses

Typical uses include

- Transformers and vessels
- Valves, piping and pumps
- Containment areas
- Ducts, plenums and baghouses

Features

- Excellent chemical and corrosion resistance
- Ease of mixing
- Can be applied by brush, roller or spray
- Will withstand temperatures up to 350°F

Surface Preparation

Surfaces must be clean, dry, and free from dust, dirt, oil, grease, welding flux, mill scale, rust, corrosion products, oxides, previously applied paints or other foreign matter. Remove all oil, grease, soil, drawing and cutting compounds and other foreign matter per SSPC SP1, "Solvent Cleaning". Remove all rust, mill scale and all previously applied paints by abrasive blast to SSPC SP 10 "Near White Blast Cleaning" After all surfaces have been blast cleaned the anchor pattern should be 1.5 to 2.0 mils. of profile depth. Surfaces must be clean, dry and free from oil, grease, tar, salts, chalk, rust, corrosion products, mill scale, paint, or other foreign matter.

Steel: Remove any oil or grease by solvent cleaning, using Dampney 170 Cleaning Solvent, following the requirements of SSPC SP 1 "Solvent Cleaning". Remove all surface imperfections that will cause premature coating failure. Chip, scrape or grind off weld splatter. Grind down all sharp and rough edges, silvers, gouges, pits and projections. Fill in pitted areas after grinding with acceptable filler material. Sharp edges and projections are difficult to coat properly and will leave little or no coating to protect the underlying steel. After completion of primary surface preparation work blast all surface per SSPC SP 10 "Near White Blast

Cleaning" with a profile depth of 1.5 to 2.0 mils in all blasted surfaces.

Galvanized or Aluminum Surfaces: After completion of preliminary surface preparation work apply one coat of Endcor 400 Wash Primer to etch and precondition surfaces. Do not apply Protexior 795 directly to an untreated surface.

Previously Painted Steel Surfaces: Remove all oils, grease and other contaminants from the surface to be coated in accordance with SSPC SP 1 "Solvent Cleaning". Power disc sand rusted area and hand sand sound coating. Make a test application of Protexior 795 Primer on old paint to test for lifting, bubbling or cracking before repainting. If lifting occurs, the old finish should be removed.

Concrete Surfaces: Follow instructions listed in the Protexior 793 Clear Bulletin for surface preparation and application instructions of sealer/primer for concrete.

Mixing

Mixing ratio is 4 parts (A Base) to 1 part (B Activator) by volume. Using an air driven explosion proof power mixer mix each component separately, then combine and mix thoroughly until uniformly blended. Use an explosion-proof air driven mixer.

Thinning

Formulated for use as supplied. Do not thin.

Pot Life

The Pot life is 8 hours at 75°F (23.9°C) and 50% RH. Pot life will vary with temperature and decreases as temperature increases. For Limitations see physical properties section. Do not apply coating that has aged beyond the pot life limit as spraying characteristics and film integrity may be impaired.

Application Guidelines

Apply by conventional or airless spray, brush or roller. The following equipment, or equivalent, may be used:

Conventional Spray:

Use a pressure pot equipped with dual regulators

DeVilbiss Spray Gun	JGA
Atomizing pressure	60 psi
Fluid pressure	25 psi.
Fluid Tip	EF
Air Cap	704
Material Hose	3/8"

Airless Spray:

Pump Ratio	30:1 (Min.)
Material Hose	½" I.D.
Tip Size	.014-.021"
Air pressure to pump	100 psi
Pump Pressure	80-90 psi
Output	2400-2700 psi
Filter size	60 Mesh

Brush: Use a natural bristle brush. Keep a wet edge at all times.

Roller: Use a solvent resistant roller with nap sized for the application of this primer.

Application Procedure

Do not apply Protexior 795 Primer below 50°F (9.9°C) or above 120°F (49°C). Do not apply primer or finish coat unless the surface temperature is above 5°F (3°C) dew point.

Clean or flush all application equipment with Dampney 100 Thinner before use. See mixing instruction before starting application. Apply one continuous coat at 3.5-5.0 wet mils to achieve dry film thickness of 2.0-3.0 dry mils. Use "Crosshatch" method with 50% overlap in each pass to avoid pinholes and holidays. Pre-coat all edges, welds, corners, bolts and rivets, etc. Exercise care to prevent sags or runs.

Storage

Store in a cool, dry place with temperature between 50°F (9.9°C) and 85°F (29.4°C).

Clean up

Bulletin 795

Thoroughly flush equipment and hoses immediately after use with Dampney 100 Thinner. Dismantle spray equipment. Clean Parts, brushes and roller with Dampney 100 Thinner.

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

For Industrial Use Only

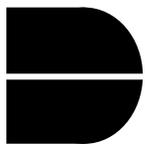
Shipping Weight	1gal.unit	5 gal. unit
Protexior 795 (Mixed)	13 lbs.	65 lbs.
Protexior 795 A	11.4 lbs.	57 lbs.
Protexior 795 B	1.7 lbs.	8.5 lbs.

Bulletin 795

Physical Properties

Characteristic	Protexior 795 Epoxy Primer		
Generic Type	Epoxy		
Color	Red		
Finish	Flat		
Number of components	Two		
Mixing Ratio by volume	4:1		
Weight per gallon(mixed)	22.5 lbs		
Viscosity at 75°F	66 – 68 KU		
Solids by Volume	60%		
Temperature Resistance			
Continuous	350°F (177°C)		
Dry film thickness per coat	4.0 to 5.0 mils		
Wet film thickness per coat	6.6 to 8.3 mils		
Theoretical coverage per gallon	962 sq. ft. @ 1 mil		
Application temperature	Normal	Minimum	Maximum
Ambient air	65-85°F (18-29°C)	50°F (10°C)	100°F (38°C)
Substrate	65-85°F (18-29°C)	50°F (10°C)	120°F (49°C)
Coating materials	65-85°F (18-29°C)	55°F (13°C)	90°F (32°C)
Humidity	20-75 %	0%	85%
Drying time	50°F(10°C)	75°F(23.9°C)	90°F(32°C)
To Touch	24 hrs	12 hrs	10 hrs
To Recoat	48 hrs	12 hrs	10 hrs
Maximum recoat time	5 days		
Final Cure	7 days at 75°F(23.9°C)		
Pot life	8 hours		
Flash Point			
Part A	40°F(4.4°C)		
Part B	-4°F(-20°C)		
Shelf Life	1 Year		
VOC (Volatile Organic Compounds)	1.04 lbs./gal		

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Dampney

Protective Coatings

Thurmalox® 70 Air Dry Silicone Coating for Stainless Steel Prevents Stress Corrosion Cracking Heat Resistant to 1000°F

Description

Thurmalox 70 is an air drying, silicone based heat resistant coating that protects thermally insulated austenitic stainless steel from chloride induced stress corrosion cracking. Thurmalox 70 withstands temperatures to 1000°F (538°C) with peaks to 1100°F (593°C). It is formulated to contain the minimum amounts of attainable chlorides, halides, sulfides, nitrates and metals that induce external stress corrosion cracking. Every batch of Thurmalox 70 is tested by an independent laboratory for leachable chloride content.

Thurmalox 70 is formulated to meet the currently accepted practice for selection of protective coatings for stainless steel surfaces under thermal insulation as set forth in NACE Technical Committee Report 6H189 "A State-of-the-Art Report of Protective Coatings for Carbon Steel and Austenitic Stainless Steel Surfaces Under Thermal Insulation".

Recommended Uses

- Insulated and uninsulated stainless steel piping, vessels and equipment.
- Nuclear power facilities where a high temperature coating for insulated stainless steel with minimum amounts of chlorides, other halides, nitrates, sulfides and metals is needed.

Features

- Air Dries, easy to apply system
- Withstands continuous temperature of 1000°F (538°C) with peaks to 1100°F (593°C).
- Free of heavy metal pigments.
- Does not contribute to weld embrittlement of stainless steel welds.
- Prevents wet chlorides from the atmosphere or process operations from coming into contact with stainless steel surfaces.
- Excellent bond to stainless steel without need to abrasive blast (see Surface Preparation).

- Prevents insulation, which may contain chlorides, from coming into contact with stainless steel surfaces.

Not Recommended For

- Immersion service
- Interiors of stacks, breechings and scrubbers

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.

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

Surface temperature must be at least 5°F (3°C) above dew point. For optimum protection apply two coats of Thurmalox 70 to a dry film thickness of 1.5-2.0 mils (37-50 microns) per coat. Total recommended dry film thickness is 3.0-4.0 mils (75-100 microns).

Application Equipment

Conventional spray is the recommended method of application. However, Thurmalox 70 may also be applied by airless spray, brush or roller. Do not apply Thurmalox 70 in heavier films than specified since blistering may occur.

Conventional Spray:

Spray gun	DeVilbiss MBC-510
Fluid tip	AV115-FX (.042" tip)
Air cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	40-45 psi

*Smaller hose diam. or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips*	163-614, 163-616 (12" fan)
Pump	Graco Bulldog 30:1
Fluid hose	3/8" ID
Air pressure to pump	65-80 psi

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 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.

Thinning

Formulated for use as supplied. Do not thin.

Dry Time 70°F (21°C) 50% RH

Thurmalox 70 will air dry tack and thumb print free within ½ to 1 hour. Allow 8 hours dry time between coats. Allow 24 hours dry time prior to shipping and handling if coating is not heat cured. Stainless steel surfaces coated with Thurmalox 70 in the air dried state can be handled and shipped prior to a heat cure as long as shipping and handling procedures for thin filmed systems are followed. Avoid mechanical

abrasion during shipping and handling. 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 350°F (177°C) for 30 minutes. Equipment protected with the Thurmalox 70 in the air-dried state will heat cure when placed into service.

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/MSHA 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/MSHA 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 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

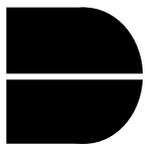
TECHNICAL DATA

Characteristics	Thurmalox 70
Generic Type	Silicone
Color	Black
Temperature resistance	
Continuous	1000°F (538°C)
Intermittent	1100°F (593°C)
Percent (%) Solids by volume	18
Dry film thickness per coat	1.5 - 2.0 mils (37 - 50 microns)
Wet film thickness per coat	8.5 - 10.5 mils (200 - 250 microns)
Theoretical coverage per gallon	287 mil. sq. ft. 6.8 sq. m. @ 25 microns per liter
Application temperature @ 50% RH	50°F - 120°F (10°C - 50°C)
Drying time @ 50% RH	50°F (10°C) 70°F (21°C)
To touch	1 hour 30 minutes
To recoat	12 hours 8 hours
To ship	48 hours 24 hours
Full cure @ 350°F (177°C)*	30 minutes
Weight per gallon	
Thurmalox 70	8.6 lb. (3.9 kg.)
Dampney 170 Thinner	8.0 lb. (3.7 kg.)
Dampney 100 Thinner	7.2 lb. (3.2 kg.)
Flash point	45°F (7°C)
Pot life	N/A
Shelf life	1 year
Volatile organic compounds	5.96 lb./gal. (715 g./l.)

* See Dry Time section

WARRANTY

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Dampney

Protective Coatings

Thurmalox[®] 70C Air Dry VOC Compliant High Solids Coating Prevents Stress Corrosion Cracking Heat Resistant to 1000°F

Description

Thurmalox 70C is a VOC compliant, air drying, silicone based heat resistant coating that protects thermally insulated austenitic stainless steel from chloride induced stress corrosion cracking. Thurmalox 70C withstands temperatures to 1000°F (538°C). It is formulated to contain the minimum amounts of attainable chlorides, halides, sulfides, nitrates and metals that induce external stress corrosion cracking. Every batch of Thurmalox 70C is tested by an independent laboratory for leachable chloride content.

Thurmalox 70C is formulated to meet the currently accepted practice for selection of protective coatings for stainless steel surfaces under thermal insulation as set forth in NACE Technical Committee Report 6H189 "A State-of-the Art Report of Protective Coatings for Carbon Steel and Austenitic Stainless Steel Surfaces Under Thermal Insulation".

Recommended Uses

Application to stainless steel surfaces where (1) the benefits of Thurmalox 70C 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.

- Insulated and uninsulated stainless steel piping, vessels and equipment
- Nuclear power facilities where a high temperature coating for stainless steel with minimum amounts of chlorides, other halides, nitrates, sulfides and metals is needed

Features

- VOC compliant - 3.45 lb./ gal. (413 g./l.)
- Air Dries
- Withstands continuous temperature of 1000°F (538°C).
- Free of heavy metal pigments.

- Does not contribute to weld embrittlement of stainless steel welds.
- Prevents wet chlorides from the atmosphere or process operations from coming into contact with stainless steel surfaces.
- Easy to apply system
- Excellent bond to stainless steel without need to abrasive blast (see Surface Preparation).
- Prevents insulation, which may contain chlorides, from coming into contact with stainless steel surfaces.

Not Recommended For

- Immersion service
- Interiors of stacks, breechings and scrubbers

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.

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

Surface temperature must be at least 5°F (3°C) above dew point. Prior to application of ThurmaloX 70C, bring material to 70°F (21°C) for optimal application properties. For optimum protection apply two coats of ThurmaloX 70C to a dry film thickness of 1.5-2.0 mils (37-50 microns) per coat. Total recommended dry film thickness is 3.0-4.0 mils (75-100 microns).

Application Equipment

Conventional spray is the recommended method of application. However, ThurmaloX 70C may also be applied by airless spray, brush or roller. Do not apply ThurmaloX 70C in heavier films than specified since blistering may occur.

Conventional Spray:

Spray gun	DeVilbiss JGA402
Fluid tip	EF
Air cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	60 psi

Provide material pot with agitator, regulators for fluid and air pressure, and oil and moisture traps in supply line.

*Smaller hose diameter or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips*	163-610, 163-315
Pump	Graco Bulldog 30:1
Fluid hose	3/8" ID
Air pressure to pump	100 psi
Pump operating pressure	80-90 psi

* Use Reverse-A-Clean® tips for fast, easy clean out.

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 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.

Thinning

Only thin ThurmaloX 70C with Dampney 180 Thinner. Do not thin with Dampney 170 Thinner. Do not thin beyond federal, state and/or local VOC (volatile organic compound) emission regulations. Note: Use Dampney

170 Thinner only in the surface preparation of small stainless steel areas. 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 70C will air dry tack and thumb print free within 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. Stainless steel surfaces coated with ThurmaloX 70C in the air-dried state can be handled and shipped prior to a heat cure as long as shipping and handling procedures for thin-film systems are followed. Avoid mechanical abrasion during shipping and handling. 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 350°F (177°C) for 30 minutes. Equipment protected with the ThurmaloX 70C in the air-dried state will heat cure when placed into service.

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

Bulletin 70C

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.

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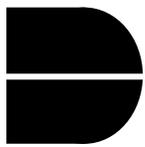
TECHNICAL DATA

Characteristics	Thurmalox 70C
Generic Type	Silicone
Color	Black
Temperature resistance	1000°F (538°C) Continuous 1100°F (593°C) Intermittent
Percent (%) Solids by volume	18
Dry film thickness per coat	1.5 - 2.0 mils (37 - 50 microns)
Wet film thickness per coat	8.0 - 11.0 mils (200 - 275 microns)
Theoretical coverage per gallon	290 mil. sq. ft. (77 sq. m. @ 25 microns) 6.8 sq. m. @ 25 microns per liter
Application temperature @ 50% RH	50°F - 120°F (10°C - 50°C)
Drying time @ 50% RH	50°F (10°C) 70°F (21°C)
To touch	8-10 hours 6-8 hours
To recoat	24 hours 10-12 hours
To ship	72 hours 48 hours
Full cure @ 350°F (177°C)*	30 minutes
Weight per gallon	
Thurmalox 70C	9.4 lb. (4.3 kg.)
Dampney 170 Thinner	8.0 lb. (3.7 kg.)
Dampney 180 Thinner	7.2 lb. (3.2 kg.)
Flash point	60°F (16°C)
Pot life	N/A
Shelf life	1 year
Volatile organic compounds	3.45 lb./gal. (413 g./l.)

* See Dry Time section

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.**



Dampney

Protective Coatings

Thurmalox[®] 200 Series Air Dry Silicone Coatings Heat Resistant to 500°F Standard and Custom Colors

Description

Thurmalox 200 series coatings are single component heat resistant coatings based on modified silicone resins and thermally stable pigments. They are formulated specifically to protect metal surfaces operating to 500°F (260°C). For maximum corrosion protection prime metal surfaces with Thurmalox 210 modified silicone zinc dust heat and corrosion resistant primer and topcoat with Thurmalox 200 series. The 210 primer/200 series topcoat system provides outstanding adhesion, film integrity, color stability, corrosion-, weathering-, and thermal shock-resistance throughout this entire temperature range. Thurmalox 200 series coatings are available in a wide range of standard (see Master Color Card) and custom colors.

Recommended Uses

- Stacks, Breechings, Boiler Casings
- Refinery Equipment - Heaters, Crackers
- Reformers
- Furnaces, Kilns, Ovens
- Compressors, Turbines, Engines
- Piping, Pumps, Manifolds
- Process Vessels, Heat Exchangers
- Stainless Steel

Features

- Air dries, easy to apply
- One component system
- Withstands continuous temperature to 500°F (260°C)
- Outstanding heat and weathering resistance
- Excellent color stability to 500°F (260°C)
- Outstanding resistance to thermal shock

Not Recommended For

- Immersion service
- Service above 500°F (260°C)
- Interiors of stacks, breechings and scrubbers
- Under insulation

Surface Preparation - 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-SP 10, "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 Pen", 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-SP 6, including the desired surface profile (anchor pattern).
5. Feather out all edges of adjacent painted surfaces 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.

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.

Applications Guidelines

Surface temperature must be at least 5°F (3°C) above dew point.

Carbon Steel

Primer: Thurmalox 210 Primer	2.0-2.5 mils (50-62 microns)
Topcoat: Thurmalox 200 Series	2.0-2.5 mils (50-62 microns)
Total dry film thickness	4.0-5.0 mils (100-125 microns)

Uninsulated Stainless Steel *

For optimum protection apply two coats of Thurmalox 200 to a dry film thickness of 2.0-2.5 mils (50-62 microns) per coat. Total recommended dry film thickness is 4.0-5.0 mils (100-125 microns).

* For application of other Thurmalox 200 series colors to uninsulated stainless steel consult Dampney Technical Service.

Application Equipment

Conventional spray is the recommended method of application. However, Thurmalox 200 series coatings may also be applied by airless spray, brush or roller. Do not apply Thurmalox 200 series coatings in heavier films than specified since blistering may occur.

Conventional Spray:

Spray gun	DeVilbiss MBC-510
Fluid tip	AV115-FX (0.0425")
Air cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	40-45 psi

*Smaller hose diam. or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips	163-614, 163-616 (12"fan)
Pump	Graco Bulldog 30:1
Fluid hose	3/8" ID
Air pressure to pump	65-80 psi

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 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.

Thinning

Only thin Thurmalox 200 series coatings with Dampney 112 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 200 series coatings 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 200 series coatings can be handled and shipped as long as shipping and handling procedures for thin-film systems are followed. Avoid mechanical abrasion during shipping and handling. Allow one hour solvent flash off period before placing into service.

Cleanup

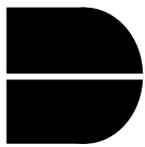
Thoroughly flush spray equipment and hoses immediately after use with Dampney 100 Thinner. Dismantle spray equipment and clean parts, brushes and rollers with Dampney 100 Thinner.

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 use of a positive pressure supplied-air respirator (NIOSH approved) is required. Use explosion-proof lights and electrical equipment. Use only nonsparking tools and equipment. Wear conductive and nonsparking footwear. Make certain all



Dampney

Protective Coatings

**Thurmalox® 200C Air Dry Series
VOC Compliant Silicone Coatings
Heat Resistant to 500°F
Standard and Custom Colors**

Description

Thurmalox 200C series coatings are VOC compliant, single component heat resistant coatings based on modified silicone resins and thermally stable pigments. They are formulated specifically to protect metal surfaces operating to 500°F (260°C). For maximum corrosion protection prime metal surfaces with Thurmalox 210C VOC compliant, modified silicone zinc dust heat and corrosion resistant primer and topcoat with Thurmalox 200C series. The 210C primer/200C series topcoat system provides outstanding adhesion, film integrity, color stability, corrosion-, weathering-, and thermal shock-resistance throughout this entire temperature range. Thurmalox 200C series coatings are available in a wide range of standard (see Master Color Card) and custom colors.

Recommended Uses

- Applications that require VOC compliant high temperature coatings
- Stacks, Breechings, Boiler Casings
- Reformers
- Furnaces, Kilns, Ovens
- Compressors, Turbines, Engines
- Piping, Pumps, Manifolds
- Process Vessels, Heat Exchangers
- Heaters

Features

- VOC compliant - 3.45 lb /gal (414 g./l.)
- Air dries, easy to apply
- One component system
- Withstands continuous temperature of 500°F (260°C)
- Outstanding heat and weathering resistance
- Excellent color stability to 500°F (260°C)
- Outstanding resistance to thermal shock

Not Recommended For

- Immersion service
- Service above 500°F (260°C)
- Interiors of stacks, breechings and scrubbers

Surface Preparation - 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-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5 - 2.0 mils maximum. 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-SP 6, including the desired surface profile (anchor pattern).
5. Feather out all edges of adjacent painted surfaces 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. For small surface areas, solvent wipe with Dampney 170 Thinner, a chloride free solvent, using proper procedures and precautions to minimize hazards.

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

Surface temperature must be at least 5°F (3°C) above dew point.

Carbon Steel

Primer: Thurmalox 210C Primer	2.0-2.5 mils (50-62 microns)
Topcoat: Thurmalox 200C Series	2.0-2.5 mils (50-62 microns)
<hr/> Total dry film thickness	<hr/> 4.0-5.0 mils (100-125 microns)

Application Equipment

Conventional spray is the recommended method of application, however Thurmalox 200C series coatings may also be applied by airless spray, brush or roller. Do not apply Thurmalox 200C series coatings in heavier films than specified since blistering may occur.

Conventional Spray:

Spray gun	DeVilbiss MBC-510
Fluid tip	AV115-FX (0.0425")
Air cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	40-45 psi

*Smaller hose diameter or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips	163-614, 163-616 (12"fan)
Pump	Graco Bulldog 30:1
Fluid hose	3/8" ID
Air pressure to pump	65-80 psi

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 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.

Thinning

Thurmalox 200C 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.

Dry Time 70°F (21°C) 50% RH

Thurmalox 200C series coatings 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 200C series coatings can be handled and shipped as long as shipping and handling procedures for thin-film systems are followed. Avoid mechanical abrasion during shipping and handling. Allow one hour solvent flash off period before placing into service.

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 Material Safety Data Sheet (MSDS) for complete precautionary and disposal information.

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

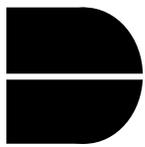
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TECHNICAL DATA

Characteristics	Thurmalox 200C Series Coatings	
Generic Type	Modified Silicone	
Color	See Master Color Card. Also available in custom colors.	
Finish	Semi-gloss	
Temperature resistance		
Continuous	500°F (260°C)	
Percent (%) Solids by volume	42	
Dry film thickness per coat	2.0 - 2.5 mils (50 - 62 microns)	
Wet film thickness per coat	4.5 - 5.5 mils (112 - 137 microns)	
Theoretical coverage per gallon	673 mil. sq. ft. (16 sq. m./liter @ 25 microns)	
Application temperature @ 50% RH	50°F-120°F (10°C-50°C)	
Drying time @ 50% RH		
To touch	50°F (10°C)	70°F (21°C)
To recoat	4-6 hours	1-2 hours
To ship	10 hours	8-10 hours
Weight per gallon		
Thurmalox 200C Series	11.2 lb. (5.2 kg.)	
Dampney 180 Thinner	7.5 lb. (3.4 kg.)	
Dampney 100 Thinner	7.2 lb. (3.2 kg.)	
Dampney 170 Thinner	8.0 lb. (3.7 kg.)	
Flash point	81°F (42°C)	
Pot life	N/A	
Shelf life	1 year	
Volatile organic compounds	3.45 lb./gal. (410 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.**



Dampney

Protective Coatings

Thurmalox[®] 210 Air Dry Silicone Zinc Dust Primer Heat Resistant to 500°F

Description

Thurmalox 210 Primer is a heat and corrosion resistant primer formulated from modified silicone resins and zinc dust. Thurmalox 210 Primer provides outstanding corrosion protection for metal surfaces operating at temperatures to 500°F (260°C). Thurmalox 210 is the primer for Thurmalox 200 series heat resistant topcoats. The 210 primer/200 series topcoat system has excellent intercoat adhesion and is able to withstand severe thermal shock throughout the entire temperature range.

Recommended Uses

- Stacks, Breechings, Boiler Casings
- Refinery Equipment - Heaters, Crackers
- Reformers
- Furnaces, Kilns, Ovens
- Compressors, Turbines, Engines
- Piping, Pumps, Manifolds
- Process Vessels, Heat Exchangers

Features

- Air dries, easy to apply
- Withstands continuous temperature to 500°F (260°C)
- Prevents rusting and streaking of steel during shutdowns
- Easily topcoated with Thurmalox 200 Series heat resistant topcoats
- Excellent intercoat adhesion
- Protects against weathering and corrosion
- Prevents underfilm corrosion attack

Not Recommended For

- Immersion service
- Interiors of stacks, breechings and scrubbers
- Stainless steel
- Under insulation

Surface Preparation - 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.
3. Abrasive blast surface per specification SSPC-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5 - 2.0 mils maximum. 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-SP 6, including the desired surface profile.
5. Feather out all edges of adjacent painted surfaces after completion of surface preparation operations and prior to application of the first coat of paint.

Mixing

Thurmalox 210 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.

Application Guidelines

Surface temperature must be at least 5°F (3°C) above dew point.

Carbon Steel

Primer: Thurmalox 210 Primer	2.0-2.5 mils (50-62 microns)
Topcoats: Thurmalox 200 Series	2.0-2.5 mils (50-62 microns)
Total dry film thickness	4.0-5.0 mils (100-125 microns)

Application Equipment

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

Conventional Spray:

Spray gun	DeVilbiss MBC-510
Fluid tip	AV115-FX (.042" tip)
Air cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	40-45 psi

*Smaller hose diameter or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips*	163-614, 163-616 (12"fan)
Pump	Graco Bulldog 30:1
Fluid hose	3/8" ID
Air pressure to pump	65-80 psi

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.

Thinning

Only thin Thurmalox 210 Primer with Dampney 112 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 210 Primer will air dry tack and thumb print free within 2-3 hours. Allow 8 hours dry time between coats. Allow 24 hours dry time prior to shipping and handling. Surfaces coated with Thurmalox 210 Primer can be handled and shipped as long as shipping and handling procedures for thin filmed systems are followed. Avoid mechanical abrasion during shipping and handling. Allow one hour solvent flash off period before heat curing or placing into service.

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 Material Safety Data Sheet (MSDS) for complete precautionary and disposal information.

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

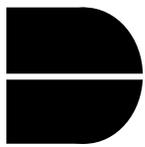
FOR INDUSTRIAL USE ONLY

TECHNICAL DATA

Characteristics	Thurmalox 210 Primer	
Generic Type	Silicone Zinc Dust	
Color	Dark Gray	
Number of Components	Two	
Temperature resistance	500°F (260°C)	
Continuous	30	
Percent (%) Solids by volume	2.0 - 2.5 mils (50 - 62 microns)	
Dry film thickness per coat	6.0 - 8.0 mils (150 - 200 microns)	
Wet film thickness per coat	480 mil. sq. ft. (11 sq. m./liter @ 25 microns)	
Theoretical coverage per gallon	50°F-120°F (10°C-50°C)	
Application temperature @ 50% RH	50°F (10°C)	70°F (21°C)
Drying time @ 50% RH	4-6 hours	2-3 hours
To touch	10-12 hours	8 hours
To recoat	48 hours	24 hours
To ship		
Weight per gallon	11.6 lb. (5.2 kg.)	
Thurmalox 210 Primer	7.2 lb. (3.2 kg.)	
Dampney 112 Thinner	7.2 lb. (3.2 kg.)	
Dampney 100 Thinner	81°F (27°C)	
Flash point	N/A	
Pot life	1 year	
Shelf life	4.9 lb./gal. (587 g./l.)	
Volatile organic compounds		

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.**



Dampney

Protective Coatings

Thurmalox® 210C Air Dry VOC Compliant Silicone Zinc Dust Primer Heat Resistant to 500°F

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 500°F (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 210C 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 - 3.2 lb./gal (381 g./l.)
- Air dries, easy to apply
- Withstands continuous temperature of 500°F (200°C)
- Prevents rusting and streaking of steel during shutdowns
- Easily topcoated with Thurmalox 200C Series heat resistant topcoats
- Excellent intercoat adhesion
- Protects against weathering and corrosion
- Prevents underfilm corrosion attack

Not Recommended For

- Immersion service
- Interiors of stacks, breechings and scrubbers
- Stainless steel

Surface Preparation - 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.
3. Abrasive blast surface per specification SSPC-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5 - 2.0 mils maximum. 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-SP 6, including the desired surface profile.
5. Feather out all edges of adjacent painted surfaces after completion of surface preparation operations and prior to application of the first coat of paint.

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.

Bulletin 210C

Application Guidelines

Surface temperature must be at least 5°F (3°C) above dew point.

Uninsulated Carbon Steel

Primer: Thurmalox 210C Primer	2.0-2.5 mils (50-62 microns)
Topcoats: Thurmalox 200C Series	2.0-2.5 mils (50-62 microns)
Total dry film thickness	4.0-5.0 mils (100-125 microns)

Application Equipment

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

Conventional Spray:

Spray gun	DeVilbiss MBC-510
Fluid tip	FX (1.1 mm tip)
Air cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	40-45 psi

* Smaller hose diameter or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips*	163-614, 163-616 (12"fan)
Pump	Graco Bulldog 30:1
Fluid hose	3/8" ID
Air pressure to pump	65-80 psi

* Use Revers-A-Clean® tips for fast, easy clean out.

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.

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.

Dry Time 70°F (21°C) 50% RH

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 procedures for thin filmed systems are followed. Avoid mechanical abrasion during shipping and handling. Allow one hour solvent flash off period before heat curing or placing into service.

Cleanup

Thoroughly flush spray equipment and hoses immediately after use with Dampney 180 Thinner. Dismantle spray equipment and clean parts, brushes and rollers with Dampney 180 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 Material Safety Data Sheet (MSDS) for complete precautionary and disposal information.

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

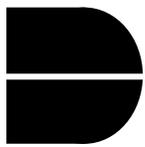
FOR INDUSTRIAL USE ONLY

TECHNICAL DATA

Characteristics	Thurmalox 210C Primer	
Generic Type	Silicone Zinc Dust	
Color	Dark Gray	
Number of Components	Two	
Temperature resistance	500°F (260°C)	
Continuous	30	
Percent (%) Solids by volume	2.0 - 2.5 mils (50 - 62 microns)	
Dry film thickness per coat	6.8 – 9.0 mils (150 – 200 microns)	
Wet film thickness per coat	481 mil. sq. ft. (11.8 sq. m./liter @ 25 microns)	
Theoretical coverage per gallon	50°F-120°F (10°C-50°C)	
Application temperature @ 50% RH	50°F (10°C)	70°F (21°C)
Drying time @ 50% RH	4-6 hours	1 – 2 hours
To touch	10-12 hours	8 hours
To recoat	72 hours	24 hours
To ship		
Weight per gallon		
Thurmalox 210C Primer	13.8 lb. (6.3 kg.)	
Dampney 180 Thinner	11.2 lb. (5.2 kg.)	
Flash point	81°F (42°C)	
Pot life	N/A	
Shelf life	1 year	
Volatile organic compounds	3.2 lb./gal. (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.**



Thurmalox® 218 Primer/219 Topcoat Coating Under Insulation (CUI) System Wet/Dry Thermal Cycling to 450°F Apply Directly to Hot Steel

Description

Thurmalox 218 Primer/219 Topcoat System is a VOC compliant, high build, modified silicone coating formulated for the protection of metal surfaces under insulation exposed to temperatures from ambient to 450°F (232°C). This coating system is specifically formulated to be applied directly to surfaces operating between ambient temperature and up to 350°F (177°C). Thurmalox 218/219 performs exceptionally in continuous CUI immersion of hot and/or boiling water. The system has excellent resistance to continuous and/or rapid wet-dry-wet thermal cycling to 450°F (232°C). It is tough, durable and has excellent resistance to damage during transportation, storage, erection and insulation applications.

Recommended Uses

- Insulated hot equipment and piping
- Insulated equipment exposed to severe thermal shock to 450°F (232°C)
- Equipment under insulation exposed to wet-dry-wet cyclic conditions from ambient to 450°F (232°C)

Features

- Apply directly to metal surfaces as hot as 350°F (177°C)
- Coat hot equipment without being shut down
- Maintains greater flexibility at elevated temperatures as compared to conventional epoxy systems.
- Re-insulate after 24 hours
- High solids, high build
- Excellent thermal cycling resistance
- VOC compliant system

Surface Preparation - 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-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5 - 2.0 mils. Abrasive used in blasting should be selected carefully from materials of mesh size required to produce the desired anchor pattern.

Application Guidelines

Surface temperature must be at least 5°F (3°C) above dew point.

Insulated Carbon and Stainless Steel*

Primer: Thurmalox 218	4.0-6.0 mils (100-150 microns)
Topcoat: Thurmalox 219	4.0-6.0 mils (100-150 microns)
Total dry film thickness	8.0-12.0 mils (200-300 microns)

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", using Dampney 170 Cleaning Solvent.
2. DO NOT USE CHLORINATED SOLVENTS ON STAINLESS STEEL SURFACES.
3. For large surface areas blast with "Starblast XL"* to achieve a surface profile of 1.5-2.5 mils.
4. For small surface areas, power sand following SSPC-SP 11, "Power Tool Cleaning", using 16 or 24 grit aluminum oxide coated abrasive fiber disc attached to a rubber pad backer.

*Starblast is a Dupont registered trademark

Application Guidelines

Surface temperature must be at least 5°F (3°C) above dew point.

Uninsulated Stainless and Carbon Steel*

Primer: Thurmalox 218	4.0-6.0 mils (100-150 microns)
2 nd coat: Thurmalox 219	4.0-6.0 mils (100-150 microns)
Topcoat: Thurmalox 217	1.5-2.0 mils (35-50 microns)

Thurmalox 260/260C should be used in place of 217 for hot application

Mixing

Thurmalox 218 Primer and Thurmalox 219 Topcoat are two component coatings consisting of a Part A and Part B that must be mixed together before use. The mix ratio for Thurmalox 218 is 4:1 and that of Thurmalox 219 is 2:1 by

Bulletin 218/219

volume. The individual component should be mixed separately to disperse pigment uniformly. Add Part B to Part A and mix thoroughly with a low-speed power mixer for a minimum of 3 minutes or until mixed coating is completely blended and of uniform color.

Application Equipment

Thurmalox 218/219 coatings may be applied by brush, roller, airless spray or conventional spray. **Brush/Roller:** Extra care should be taken to measure and hold film thickness when applied by brush and roller. This method should only be used when spray method is not available. **Brush:** Use a medium china bristle with steel shank and wooden handle. Do not use synthetic-bristled brushes. **Roller:** Use a wooden handled roller with a 1/2" phenolic cored lambs wool roller attached. Roll coating out thoroughly, maintaining a continuous wet edge and uniform appearing paint film.

Conventional Spray:

Spray gun	DeVilbiss JGA402 or equal
Fluid tip	EF
Air Cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	60 psi

Provide material pot with agitator, regulators for fluid and air pressure, and oil and moisture traps in supply line.

*Smaller hose diam. or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips*	163-610, 163-315
Pump	Graco Bulldog 30:1
Fluid hose	3/8" to 1/2" ID
Air pressure to pump	100 psi
Pump operating pressure	80-90 psi

*Use Reverse-A-Clean® tips for fast, easy clean out.

Procedures for Application to Hot Surfaces

1. Flush spray equipment with Dampney 162 Thinner before use.
2. Thinning of Thurmalox 218/219 coatings is not normally required for spray application.
3. Dampney 162 Thinner is a high flash point (102°F), slow evaporating solvent formulated especially for application to hot surfaces.
4. **WARNING!** DO NOT use any other solvents to thin Thurmalox 218/219 coatings. A fire hazard may result from use of solvents with low auto ignition temperatures when applying Thurmalox 218/219 coatings to hot surfaces, and rapid solvent evaporation can cause dry spray and poor film characteristics.
5. Use Dampney 162 Thinner cautiously. Addition of a small amount of thinner will cause a great reduction in coating viscosity. Excessive thinning will cause runs or sags.

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/or strong winds will promote dry spray.
- b) To avoid dry spray, always apply coatings perpendicular to hot surfaces without reaching.
- c) Perpendicular spraying will also minimize overspray and lap marks.

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.

Note: Thurmalox 218 will take on an amber tone at 250°F (121°C). This is normal.

Thinning

Only thin Thurmalox 218/219 coatings with Dampney 162 Thinner. Do not thin beyond federal, state and/or local VOC emission regulations. Note: Use of other thinners not approved by Dampney may hinder product performance and void product warranty.

Cure Time 50% RH

Thurmalox 218/219 Coating System will cure within 8 hours. Allow 4 hours dry time between coats with a maximum recoat time of 5 days. A temperature of 200°F (93°C) must be achieved for the coating system to withstand hot/boiling water. Higher application temperature will reduce cure time.

Cleanup

Thoroughly flush spray equipment and hoses immediately after use with Dampney 162 Thinner. Dismantle spray equipment and clean parts, brushes and rollers with Dampney 162 Thinner.

Storage

Store in a 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 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	Thumalox 218 Primer		Thumalox 219 Topcoat	
Generic Type	Modified Silicone		Modified Silicone	
Mix Ratio by volume	4:1		2:1	
Color	Light Gray		Black	
Temperature resistance**				
Continuous	450°F (232°C)		450°F (232°C)	
Intermittent	500°F (260°C)		500°F (260°C)	
Percent (%) Solids by volume	61		58	
Dry film thickness per coat	5.0 – 6.0 mils (125 – 150 microns)		5.0 - 6.0 mils (125 - 150 microns)	
Wet film thickness per coat	8.0 – 10.0 mils (200 – 250 microns)		8.0 - 10.0 mils (200 - 250 microns)	
Theoretical coverage	1000 mil. sq. ft. per gallon 24 sq. m. @ 25 microns per liter		937 mil. sq. ft. per gallon 22 sq. m. @ 25 microns per liter	
Application temp. @ 50% RH	Min. Recoat	Max. Recoat	Min. Recoat	Max. Recoat
77° - 120°F	4 hrs	5 days	4 hrs	5 days
121° - 160°F	4 hrs	8 hrs	4 hrs	8 hrs
161° - 200°F	4 hrs	6 hrs	4 hrs	6 hrs
201° - 250°F	2 hrs	4 hrs	2 hrs	4 hrs
251° - 350°F	1 hr	3 hrs	1 hr	3 hrs
To re-insulate	24 hours		24 hours	
Weight per gallon	11.1 lb (5.0 kg)		14.6 lb (6.6 kg)	
Pot life	2 hours		2 hours	
Shelf life	1 year		1 year	
Volatile organic compounds	2.5 lb./gal. (300 g./l.)		2.8 lb./gal. (336 g./l.)	

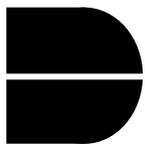
* A temperature of 200°F (93°C) must be achieved for the coating system to withstand hot/boiling water.

** Note 218 will change to amber color at 250°F (121°C). This is normal.

TEST DATA

Test Data	Thumalox 218 Primer / 219 Topcoat
Boiling water immersion resistance	Cyclic immersion - 3 months - no effect
Ambient water immersion resistance	Cyclic immersion - 3 months - no effect
Thermal shock resistance	450°F (232°C) quenched into cold water 40 cycles in 6 hrs
Salt fog resistance	
Unscribed	ASTM B 117-95 5,000 hrs no effect
Scribed	ASTM B 117-95 5,000 hrs no undercutting at scribe
Hardness	ASTM D 3363-92A 6H
Adhesion	ASTM D 3359-95 5B
Splash and spill resistance	30% sulfuric acid excellent
	10% hydrochloric acid excellent
	85% phosphoric acid excellent
	5% acetic acid excellent
	5% sodium hydroxide excellent
	29% ammonium hydroxide excellent
	Methyl iso-butyl ketone excellent
	Iso-propyl alcohol excellent
	Mineral spirit excellent
	E E acetate excellent

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Dampney

Protective Coatings

Thurmalox[®] 225HD High Build, Air Dry, High Temperature VOC Compliant Coating

Description

Thurmalox 225HD is a two component, corrosion inhibitive, high build, air dry, high temperature, VOC compliant coating system for protection of carbon and stainless steel surfaces from atmospheric corrosion and corrosion under insulation. It is an ideal coating to cover steel surfaces with deep profiles, eliminating the problem of pinpoint rusting by covering the peaks with this unique high build coating. Thurmalox 225HD may be topcoated with itself, Thurmalox 230/230C Series or Thurmalox 260/260C Series.

Recommended Uses

Application where (1) the benefits and features of Thurmalox 225HD are needed and (2) where federal, state, and/or local authorities require high temperature coatings to be compliant with reduced VOC (volatile organic compound) emissions regulations.

- Stacks, Breechings, Boiler Casings
- Manifolds, Mufflers and Exhausts
- Hot Piping, Process Vessels, Heat Exchangers
- Refinery Equipment - Heaters, Crackers
- Furnaces, Kilns, Heat Exchangers
- Insulated surfaces from 500°F (260°C) to 1000°F (538°C). (NOTE: 225HD must be air dried for a minimum of 7 days before insulating)

Features

- High build, high solids
- Self priming, two component
- Easy to apply by brush, roller or spray
- VOC compliant – 3.44 lb./gal. (292 g. /l.)
- Withstands temperature of 1000°F (538° C)
- Air dries
- Easily topcoated with Dampney Topcoats
- Protects against weathering and corrosion

Not Recommended For

- Interiors of breechings
- Interiors of scrubbers

Performance Testing Data

High Temperature Test: ASTM 2485 Method A 1000°F (538°C)
100% Pass

Abrasion Resistance: ASTM D4060 (Heat Cured)
(CS-17 wheel, 500 gm load, 1000 cycles). 320mg loss

Abrasion Resistance: ASTM D4060 (Air Dried)
(CS-17 wheel, 500 gm load, 1000 cycles). 370mg loss

Adhesion: (Air Dried) (ASTM D 4541 Adhesion Elcometer)
500 psi

Flexibility: ASTM D 522 Mandrel Bend Test

Heat Cured: 6.0 mils DFT-13 % elongation

Ambient Cure: 6.0 mils DFT- 22 % elongation

Salt Fog resistance: ASTM B 117 (6 mils DFT)

Heat Cured: no rust, blisters, cracking & de-lamination and no undercutting – 1500 hours

Ambient Cure: no rust, blisters, cracking, de-lamination and no undercutting – 1000 hours

Surface Preparation

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, visible contaminants or other foreign matter detrimental to the adhesion of this coating system. Remove all surface imperfections that will induce premature coating system failure. All sharp edges rounded, rough welds and weld splatter shall be ground smooth.

Carbon Steel: Insulated or Uninsulated

Abrasive blast all surfaces to SSPC-SP 10, "Near White Metal Blast" / NACE No. 2, leaving all surfaces with a profile depth of 1.5-3.0 mils (38.1-76.2 microns) after blasting. Care should be taken to select abrasives of a proper mesh size to yield the degree of cleanliness and required profile depth. If abrasive blasting is not permitted, prepare surface by "Power Tool Cleaning" per SSPC-SP 11, using a "Dynascaler[®] Air Powered Surface Preparation Tool" with 3M[®] Heavy Duty Roto Peen "Bonded Shot" flap assemblies mounted in the tool.

Bulletin 225HD

Stainless Steel: Insulated or Uninsulated

All 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", using Dampney 170 Cleaning Solvent. Prepare all surfaces by using "Starblast®" fine grade to achieve a surface profile of 1.5–2 mils (38.1-50.8 microns) of profile.

Note: DO NOT USE CHLORINATED SOLVENTS ON STAINLESS STEEL SURFACES.

Mixing

Thurmalox 225HD has a 9:1 mix ratio by volume consisting of a Part A and Part B which must be mixed together before use. The individual components must be mixed separately to disperse the pigments uniformly. Add Part B to Part A and mix thoroughly with a low-speed power mixer for a minimum of 3 minutes or until mixed coating is completely blended and of a uniform color. Do not open containers until ready to use. Keep lid on container when not in use.

Cure Time at 70°F (21°C) 50% RH

Thurmalox 225HD will air dry, tack and thumb print free within 4-6 hours. A temperature of 350°F (149°C) must be achieved to cure Thurmalox 225HD before it can be put into wet-dry-wet thermal cycling service.

Pot Life

After mixing, Thurmalox 225HD must be used within 8–12 hours.

Application Information

Apply only when air, product and surface temperatures are above 50°F (10°C) and surface temperature is at 5°F (3°C) above dew point. The relative humidity during application and curing should not exceed 85%. Thurmalox 225HD can be applied by brush, roller, airless spray or conventional spray. No thinning is necessary for brush, roller or spray application.

Brush/Roller: Extra care should be taken to measure and hold film thickness when applied by brush and roller. This method should only be used when spray method is not available.

Brush: Use a medium china bristle with steel shank and wooden handle. Do not use synthetic-bristled brushes.

Roller: Use a wooden handled roller with a 1/2" phenolic cored lambs wool roller attached. Roll coating out thoroughly, maintaining a continuous wet edge and uniform appearing paint film.

Airless Spray:

Pump: 30:1
Operating pressure: 2500-3000 psi
GPM output: 3.0 gals per minute
Material hose: 3/8" ID
Tip Size: .017"-.023"
Filter Size: None

It is recommended that Teflon packings be used.

Conventional Spray:

Fluid tip: 66
Air Cap: 63P
Atomizing Air: 50 psi
Fluid hose: 5/16" ID
Fluid Pressure: 15-20 psi

Recommended Systems

Carbon Steel: Insulated

1 st Coat: Thurmalox 225HD	4.0-5.0 mils DFT
2 nd Coat: Thurmalox 225HD	4.0-5.0 mils DFT
Total System	8.0-10.0 mils DFT

Stainless Steel: Insulated

1 st Coat: Thurmalox 225HD	4.0-5.0 mils DFT
2 nd Coat: Thurmalox 225HD	4.0-5.0 mils DFT
Total System	8.0-10.0 mils DFT

Carbon Steel: Uninsulated

1 st Coat: Thurmalox 225HD	4.0-5.0 mils DFT
2 nd Coat: Thurmalox 230C or 260C	2.5-3.0 mils DFT
Total System	6.5-8.0 mils DFT

Stainless Steel: Uninsulated

1 st Coat: Thurmalox 225HD	4.0-5.0 mils DFT
2 nd Coat: Thurmalox 230C or 260C	2.5-3.0 mils DFT
Total System	6.5-8.0 mils DFT

Note: Other Thurmalox coating systems can be put over Thurmalox 225HD as a finish coating. When extreme cyclic (fast thermal cycling) conditions are present, consult Dampney Technical Service.

Thinning

Only thin Thurmalox 225HD with Dampney 180 Thinner. Do not thin beyond federal, state and/or local VOC emission regulations. Note: Use of other thinners not approved by Dampney may hinder product performance and void product warranty.

Cleanup

Thoroughly flush spray equipment and hose immediately after use with Dampney 162 Thinner. Dismantle spray equipment and clean parts, brushes and rollers with Dampney 162 Thinner.

Storage

Store in a cool, dry place with temperatures between 50°F and 100°F (10°C and 38°C). Keep container closed when not in use.

Ordering Information

Product Numbers: Thurmalox 225HD
Package Size: 5 gallon kits
1 gallon kits

FOR INDUSTRIAL USE ONLY.

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 only with adequate ventilation during mixing and application.

Bulletin 225HD

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 application 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 that 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.

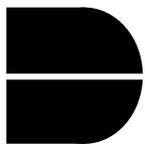
If instructions and warnings cannot be strictly followed, do not use this product.

Technical Data

Characteristics	Thurmalox 225HD
Generic Type	Modified Silicone Co-Polymer
Mix Ratio	9:1 by volume
Color	Light Gray
Number of Components	2
Percent (%) Volume Solids	50%
Theoretical Coverage	740 sq. ft./gallon 17.5 sq. m./liter (@ 1 mil/ 25 microns)
Dry Film Thickness per coat	4.0-5.0 mils (101.6 – 127 microns)
Wet: Film Thickness per coat	8.0-11.0 mils (200 – 275 microns)
Application Temp Range	50°F to 200°F
Flash Point	81°F (27.2°C)
Viscosity	1,190 CPS
Drying Times @ 50% RH Air-Dry	50°F/10°C 75°F/24°C 94°F/34°C
Touch	6 hours 4 hours 3 hours
Handle	12 hours 8 hours 6 hours
Recoat	48 hours 24 hours 12 hours
*Full Cure	7 days 7 days 7 days
Temperature resistance	
Continuous	350°F -1000°F (149°C - 538°C)
Intermittent	1200°F (648°C)
Shelf Life	1 Year
Weight per gallon	
Thurmalox 225HD (Part A)	14.4 lb (6.4 kg.)
Thurmalox 2252 (Part B)	6.8 lb (3.1 kg.)
Dampney 180 (thinning)	8.3 lb (3.7 kg.)
Dampney 170 (stainless steel cleaning)	8.8 lb (4.0 kg.)
Dampney 162 (cleaning equipment)	7.5 lb (3.4 kg.)
Volatile Organic Content (mixed)	3.5 lbs (420 grams/liter)

*Humidity, temperature and coating thickness will affect drying and curing times

Warranty: Dampney protective coating products are expressly warranted to meet application 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.



Dampney

Protective Coatings

**Thurmalox® 230 Series
Air Dry Silicone Coatings
Heat Resistance 500°F - 1200°F
Standard and Custom Colors**

Description

Thurmalox 230 series coatings are heat resistant coatings based on silicone resins and thermally stable pigments. They are formulated specifically to protect metal surfaces operating at temperatures from 500°F (260°C) to 1000°F (538°C), with peaks to 1200°F (648°C). For maximum corrosion protection, prime metal surfaces with Thurmalox 245 silicone zinc dust heat and corrosion resistant primer and topcoat with Thurmalox 230 series. The 245 primer/230 series topcoat system provides outstanding adhesion, film integrity, color stability, corrosion-, weathering-, and thermal shock-resistance from ambient to 1000°F (538°C).

Thurmalox 230 series coatings are available in a wide range of standard (see Master Color Card) and custom colors.

Recommended Uses

- Stacks, Breechings, Boiler Casings
- Refinery Equipment - Heaters, Crackers
- Reformers
- Furnaces, Kilns, Ovens
- Compressors, Turbines, Engines
- Piping, Pumps, Manifolds
- Process Vessels, Heat Exchangers
- Stainless Steel

Features

- Air dry, easy to apply system
- Withstands continuous temperature of 1000°F (538°C), with peaks to 1200°F (648°C)
- Outstanding heat and weathering resistance
- Excellent color stability to 1000°F (538°C)
- Outstanding resistance to thermal shock
- Excellent bond to stainless steel, without need to abrasive blast (see Surface Preparation)

Not Recommended For

- Immersion service
- Interiors of stacks, breechings and scrubbers

Surface Preparation - 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-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.0 - 2.0 mils minimum, with a 1.5 mil 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 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-SP 6, including the desired surface profile (anchor pattern).
5. Feather out all edges of adjacent painted surfaces 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.

Bulletin 230

- For small surface areas, solvent wipe with Dampney 170 Thinner, a chloride free solvent, using proper procedures and precautions to minimize hazards.

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

Surface temperature must be at least 5°F (3°C) above dew point.

Carbon Steel

Primer: Thurmalox 245 Primer	1.5-2.0 mils (37-50 microns)
Topcoat: Thurmalox 230 Series	1.5-2.0 mils (37-50 microns)
Total dry film thickness	3.0-4.0 mils (75-100 microns)

Uninsulated Stainless Steel *

For optimum protection apply two coats of Thurmalox 232 to a dry film thickness of 1.5-2.0 mils (37-50 microns) per coat. Total recommended dry film thickness is 3.0-4.0 mils (75-100 microns).

*For application of other Thurmalox 230 series colors to uninsulated stainless steel consult Dampney Technical Service.

Application Equipment

Conventional spray is the recommended method of application. However, Thurmalox 230 series coatings may also be applied by airless spray, brush or roller. Do not apply Thurmalox 230 series coatings in heavier films than specified since blistering may occur.

Conventional Spray:

Spray gun	DeVilbiss JGA402 or equal
Fluid tip	EF
Air cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	60 psi

*Smaller hose diam. or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips*	163-610, 163-315
Pump	Graco Bulldog 30:1
Fluid hose	3/8" to 1/2" ID
Air press. to pump	100 psi
Pump operating press.	80-90 psi

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 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.

Thinning

Formulated for use as supplied. Do not thin.

Dry Time 70°F (21°C) 50% RH

Thurmalox 230 series coatings will air dry tack and thumb print free within 1/2 - 1 hour. Allow 8 hours dry time between coats. Allow 24 hours dry time prior to shipping and handling if coating is not heat cured. Surfaces coated with Thurmalox 230 series coatings in the air dried state can be handled and shipped prior to a heat cure as long as shipping and handling procedures for thin filmed systems are followed. Avoid mechanical abrasion during shipping and handling. 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 350°F (177°C) for 30 minutes. Equipment protected with the Thurmalox 230 series coatings in the air dried state will heat cure when placed into service.

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 a 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

Bulletin 230

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 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

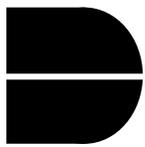
TECHNICAL DATA

Characteristics	Thurmalox 230 Series Coatings
Generic Type	Silicone
Color	See Master Color Card. Also available in custom colors.
Temperature resistance	
Continuous	1000°F (538°C)
Intermittent	1200°F (649°C)
Percent (%) Solids by volume	20
Dry film thickness per coat	1.5 - 2.0 mils (37 - 50 microns)
Wet film thickness per coat	7.5 - 10.0 mils (187 - 250 microns)
Theoretical coverage	320 mil. sq. ft. per gallon 7.65 sq. m./liter @ 25 microns per liter
Application temperature @ 50% RH	50°F-120°F (10°C-50°C)
Drying time @ 50% RH	
To touch	50°F (10°C) 70°F (21°C)
To recoat	1 hours 30 minutes
To ship	12 hours 8 hours
Full cure @ 350°F (177°C)*	48 hours 24 hours
Weight per gallon	30 minutes
Thurmalox 230 Series	10.5 lb. (4.8 kg.)
Dampney 170 Thinner	8.0 lb. (3.7 kg.)
Dampney 100 Thinner	7.2 lb. (3.2 kg.)
Flash point	45°F (7°C)
Pot life	N/A
Shelf life	1 year
Volatile organic compounds	5.4 lb./gal. (643 g./l.)

* See Dry Time section

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**.



Dampney

Protective Coatings

Thurmalox® 230C Air Dry Series VOC Compliant High Solid Coatings Heat Resistance 500°F - 1200°F Standard and Custom Colors

Description

Thurmalox 230C series coatings are VOC compliant, heat resistant coatings based on silicone resins and thermally stable pigments. They are formulated specifically to protect metal surfaces operating at temperatures from 500°F (260°C) to 1000°F (538°C), with peaks to 1200°F (648°C). For maximum corrosion protection, prime metal surfaces with Thurmalox 245C VOC compliant silicone zinc dust heat and corrosion resistant primer and topcoat with Thurmalox 230C series. The 245C primer/230C series topcoat system provides outstanding adhesion, film integrity, color stability, corrosion-, weathering-, and thermal shock-resistance from ambient to 1000°F (538°C). Thurmalox 230C series coatings are available in a wide range of standard (see Master Color Card) and custom colors.

Recommended Uses

Application to steel surfaces where (1) the benefits of Thurmalox 230C 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
- Stainless Steel

Features

- VOC compliant - 3.1 lb. / gal. (371.5 g./l.)
- Air dry, easy to apply system
- Withstands continuous temperature of 1000°F (538°C), with peaks to 1200°F (648°C)
- Outstanding heat and weathering resistance
- Excellent color stability to 1000°F (538°C)
- Outstanding resistance to thermal shock
- Excellent bond to stainless steel, without need to abrasive blast (see Surface Preparation)

Not Recommended For

- Immersion service
- Interiors of stacks, breechings and scrubbers

Surface Preparation - 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-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.0 - 2.0 mils minimum, with a 1.5 mil 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 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-SP 6, including the desired surface profile (anchor pattern).
5. Feather out all edges of adjacent painted surfaces 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.**

Bulletin 230C

- For large surface areas, steam clean with an alkaline detergent; follow by a steam or fresh water wash to remove detrimental residues.
- For small surface areas, solvent wipe with Dampney 170 Thinner, a chloride free solvent, using proper procedures and precautions to minimize hazards.

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

Surface temperature must be at least 5°F (3°C) above dew point.

Carbon Steel

Primer: Thurmalox 245C Primer	1.5-2.0 mils (37-50 microns)
Topcoat: Thurmalox 230C Series	1.5-2.0 mils (37-50 microns)
Total dry film thickness	3.0-4.0 mils (75-100 microns)

Uninsulated Stainless Steel *

For optimum protection apply two coats of Thurmalox 232C to a dry film thickness of 1.5-2.0 mils (37-50 microns) per coat. Total recommended dry film thickness is 3.0-4.0 mils (75-100 microns).

*For application of other Thurmalox 230C series colors to uninsulated stainless steel consult Dampney Technical Service.

Application Equipment

Conventional spray is the recommended method of application. However, Thurmalox 230C series coatings may also be applied by airless spray, brush or roller. Do not apply Thurmalox 230C series coatings in heavier films than specified since blistering may occur.

Conventional Spray:

Spray gun	DeVilbiss JGA402 or equal
Fluid tip	EF
Air cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	60 psi

Provide material pot with agitator, regulators for fluid and air pressure and oil and moisture traps in supply line.

*Smaller hose diam. or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips*	163-610, 163-315
Pump	Graco Bulldog 30:1
Fluid hose	3/8" to 1/2" ID
Air press. to pump	100 psi
Pump operating press.	80-90 psi

* Use Reverse-A-Clean® tips for fast, easy clean out.

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 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.

Thinning

Only thin Thurmalox 230C series coatings with Dampney 180 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.

Dry Time 70°F (21°C) 50% RH

Thurmalox 230C series coatings will air dry tack and thumb print free within 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 230C series coatings in the air dried state can be handled and shipped prior to a heat cure as long as shipping and handling procedures for thin filmed systems are followed. Avoid mechanical abrasion during shipping and handling. 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 350°F (177°C) for 30 minutes. Equipment protected with the Thurmalox 230C series coatings in the air-dried state will heat cure when placed into service.

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 a cool, dry place with temperature between 50°F and 100°F (10°C and 38°C). Keep container closed when not in use.

Bulletin 230C

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 Material Safety Data Sheet (MSDS) for complete precautionary and disposal information.

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

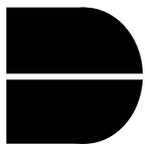
FOR INDUSTRIAL USE ONLY

TECHNICAL DATA

Characteristics	Thurmalox 230C Series Coatings
Generic Type	Silicone
Color	See Master Color Card. Also available in custom colors.
Temperature resistance	
Continuous	1000°F (538°C)
Intermittent	1200°F (649°C)
Percent (%) Solids by volume	56
Dry film thickness per coat	1.5 - 2.0 mils (37 - 50 microns)
Wet film thickness per coat	2.5 - 3.5 mils (62 - 87 microns)
Theoretical coverage	900 mil. sq. ft. per gallon 21.6 sq. m. @ 25 microns per liter
Application temperature @ 50% RH	50°F-120°F (10°C-50°C)
Drying time @ 50% RH	
To touch	50°F (10°C) 70°F (21°C)
To recoat	8-10 hours 6-8 hours
To ship	24 hours 10-12 hours
Full cure @ 350°F (177°C)*	72 hours 48 hours
Weight per gallon	30 minutes
Thurmalox 230C Series	12.8 lb. (5.8 kg.)
Dampney 170 Thinner	8.0 lb. (3.7 kg.)
Dampney 100 Thinner	7.2 lb. (3.2 kg.)
Dampney 180 Thinner	7.2 lb. (3.2 kg.)
Flash point	60°F (16°C)
Pot life	N/A
Shelf life	1 year
Volatile organic compounds	3.1 lb./gal. (371.5 g./l.)

* See Dry Time section

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.**



**Thurmalox® 240 Air Dry Series
High Temperature Resistance 1100°F - 1400°F
Standard and Custom Colors**

Description

Thurmalox 240 series coatings are high temperature coatings based on proprietary silicon ceramic matrix and thermally stable pigments. They are recommended for application to difficult-to-protect metal surfaces operating at temperatures from 1100°F (593°C) to 1400°F (760°C). Thurmalox 242-02 high temperature coating is heat resistant to 1600°F. Thurmalox 240 series coatings are resistant to corrosion, chemical attack, weathering and severe thermal shock. Contrary to normal expectations in high temperature applications, service life of applied Thurmalox 240 series coatings is extended where operating temperatures exceed 1000°F (538°C). Thurmalox 240 series coating meets the military performance criteria for MIL-P-14105. Thurmalox 240 series coatings are available in some standard and custom colors.

Recommended Uses

- Kilns, Furnaces and Ovens
- Stacks, Breechings and Heat Exchangers
- Mufflers, Silencers and Incinerators

Features

- Air drying, easy-to-apply system
- Protects against weathering and corrosion
- Unaffected by rapidly cycling temperatures
- Outstanding resistance to thermal shock
- No loss of adhesion at elevated temperatures
- Out-performs metallic-pigmented, heat resistant paints at temperatures above 1000°F (538°C).

Not Recommended For

- Immersion service
- Interiors of stacks, breechings and scrubbers

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, 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.

Surface Preparation - Carbon Steel

Abrasive blast surface per specification SSPC-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5 mils maximum. Abrasive used in blasting should be selected carefully from materials of mesh size required to produce the desired anchor pattern.

Surface Preparation - Stainless Steel

Abrasive blast surface per specification SSPC-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5 mils maximum, using only fine grade Starblast* or aluminum oxide.

* E. I. Dupont De Nemours Starblast

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 - Carbon Steel

Surface temperatures must be at least 5°F (3°C) above dew point.

Primer: Thurmalox 240 Series	1.5 mils (37 microns)
Topcoat: Thurmalox 240 Series	1.5 mils (37 microns)
<hr/>	
Total dry film thickness	3.0 mils (75 microns)

Application Guidelines - Stainless Steel *

For optimum protection apply two coats of Thurmalox 242 to a dry film thickness of 1.5-2.0 mils (37-50 microns) per coat. Total recommended dry film thickness is 3.0-4.0 mils (75-100 microns).

* For application of other Thurmalox 240 series colors to stainless steel consult Dampney Technical Service.

Application Equipment

Conventional spray is the recommended method of application. However, Thurmalox 240 series coatings may also be applied by airless spray or brush. Do not apply by roller method. Do not apply Thurmalox 240 series coatings in heavier films than specified since blistering may occur.

Conventional Spray:

Spray gun	DeVilbiss MBC-510
Fluid tip	FX (1.1 mm tip)
Air cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	40-45 psi

* Smaller hose diameter or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips*	163-614, 163-616 (12"fan)
Pump	Graco Bulldog 30:1
Fluid hose	3/8" ID
Air pressure to pump	65-80 psi

* Use Reverse-A-Clean® tips for fast, easy clean out.

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.

Thinning

Only thin Thurmalox 240 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% R.H.

Thurmalox 240 series coatings will air dry tack and thumb print free within 1/2-1 hour. Allow 8 hours dry time between coats. Allow 24 hours dry time prior to shipping and handling if coating is not heat cured. Surfaces coated with Thurmalox 240 Series coatings in

the air dried state can be handled and shipped prior to a heat cure as long as shipping and handling procedures for thin filmed systems are followed. Avoid mechanical abrasion during shipping and handling. Higher temperatures will reduce tack free, recoat and shipping times. Allow one hour solvent flash off period before heat curing or placing into service. Initial cure takes place at 350°F (177°C) for 30 minutes. Optimum properties of Thurmalox 240 series coatings are not fully realized until the coatings are exposed to temperatures above 1000°F (538°C). Equipment protected with the Thurmalox 240 series coatings in the air dried state will heat cure when placed into service.

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 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

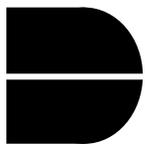
Characteristics	Thurmalox 240 Series Coatings	
Generic Type	Silicone-ceramic	
Color*	See Master Color Card. Also available in custom colors.	
Temperature resistance		
Continuous	1400°F (760°C)	
Intermittent	1600°F (871°C)	
Percent (%) Solids by volume	42	
Dry film thickness per coat	1.5 - 2.0 mils (37 - 50 microns)	
Wet film thickness per coat	3.0 - 5.0 mils (75 - 125 microns)	
Theoretical coverage per gallon	620 mil. sq. ft. (14.6 sq. m./liter @ 25 microns)	
Application temperature @ 50% R.H.	50°F-120°F (10°C-50°C)	
Drying time @ 50% R.H.		
To touch	50°F (10°C)	70°F (21°C)
To recoat	1 hour	30 minutes
To ship	12 hours	8 hours
	48 hours	24 hours
Initial cure @ 350°F (177°C)**	30 minutes	
Weight per gallon		
Thurmalox 240 Series	10.8 lb. (4.9 kg.)	
Dampney 100 Thinner	9.0 lb. (4.1 kg.)	
Flash point	81°F (27°C)	
Pot life	N/A	
Shelf life	1 year	
Volatile organic compounds	4.2 lb./gal. (504 g./l.)	

* Consult Dampney Technical Service on color selection.

** See Dry Time section

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**.



**Thurmalox® 242 Silicone Ceramic
Air Dry Series High Temperature
Resistance 1000°F - 1600°F**

Description

Thurmalox 242 Silicone Ceramic series coatings are for use on process equipment that will operate at temperatures from 1000°F to 1600°F. These coatings are resistant to corrosion, weathering and thermal shock. Contrary to normal expectations in high temperature applications, service life of applied Thurmalox 242 series coatings is extended where operating temperatures exceed 1000°F (538°C). Thurmalox 242 series coating meets the performance criteria for MIL-P-14105.

Recommended Uses

- Kilns, Furnaces and Ovens
- Turbine engines and associated housings
- Mufflers, Silencers and Incinerators
- Jet engines and tail exhaust

Features

- Air drying, easy-to-apply system
- Protects against weathering and corrosion
- Unaffected by rapidly cycling temperatures
- Outstanding resistance to thermal shock
- No loss of adhesion at elevated temperatures
- Offers low IR signature

Not Recommended For

- Immersion service
- Interiors of stacks, breechings and scrubbers

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, 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.

Surface Preparation - Carbon Steel

Abrasive blast surface per specification SSPC-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.0-1.5 mils maximum. Abrasive used in blasting should be selected carefully from materials of mesh size required to produce the desired anchor pattern.

Surface Preparation - Stainless Steel

Abrasive blast surface per specification SSPC-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.0-1.5 mils maximum, using only fine grade Starblast* or aluminum oxide.

* E. I. Dupont De Nemours Starblast

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 - Carbon Steel

Surface temperatures must be at least 5°F (3°C) above dew point.

Primer: Thurmalox 242 Series	1.5 -2 mils (37-50 microns)
Topcoat: Thurmalox 242 Series	1.5 -2 mils (37-50 microns)
<hr/>	
Total dry film thickness	3.0 – 4.0 mils (75-100 microns)

Application Guidelines - Stainless Steel *

For optimum protection apply two coats of Thurmalox 242 to a dry film thickness of 1.5-2.0 mils (37-50 microns) per coat. Total recommended dry film thickness is 3.0-4.0 mils (75-100 microns).

Application Equipment

Conventional spray is the recommended method of application. However, Thurmalox 242 series coatings may also be applied by airless spray or brush. Do not apply by roller method. Do not apply Thurmalox 242 series coatings in heavier films than specified since blistering may occur.

Conventional Spray:

Spray gun	DeVilbiss MBC-510
Fluid tip	FX (1.1 mm tip)
Air cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	40-45 psi

* Smaller hose diameter or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips*	163-614, 163-616 (12"fan)
Pump	Graco Bulldog 30:1
Fluid hose	3/8" ID
Air pressure to pump	65-80 psi

* Use Reverse-A-Clean[®] tips for fast, easy clean out.

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.

Thinning

Only thin Thurmalox 242 series coatings with recommended Dampney Thinners. For Thurmalox 242-02 use 100 Thinner. For Thurmalox 242C-02 use Dampney 180 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% R.H.

Thurmalox 242 series coatings will air dry tack and thumb print free within 1/2-1 hour. Allow 8 hours dry time between coats. Allow 24 hours dry time prior to shipping and handling if coating is not heat cured. Surfaces coated with Thurmalox 242 Series coatings in the air dried state can be handled and shipped prior to a heat cure as long as shipping and handling procedures for thin filmed systems are followed. Avoid mechanical abrasion during shipping and handling.

Higher temperatures will reduce tack free, recoat and shipping times. Allow one hour solvent flash off period before heat curing or placing into service. Initial cure takes place at 350°F (177°C) for 30 minutes. Optimum properties of Thurmalox 242 series coatings are not fully realized until the coatings are exposed to temperatures above 1000°F (538°C). Equipment protected with the Thurmalox 240 series coatings in the air dried state will heat cure when placed into service.

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 a 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 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

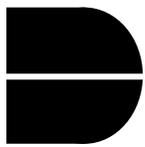
TECHNICAL DATA

Characteristics	Thurmalox 242-02	Thurmalox 242C-02
Generic Type	Silicone Ceramic	Silicone Ceramic
Color	Black	Black
Temperature resistance		
Continuous	1000°F (538°C)	1000°F (538°C)
Intermittent	1400°F (760°C)	1600°F (871°C)
Percent (%) Solids by volume	43%	45%
Dry film thickness per coat	1.5 - 2.0 mils (37 - 50 microns)	1.5-2.0 mils (37-50 microns)
Wet film thickness per coat	4.0 -5.0 mils (100 - 125 microns)	4.0-5.0 mils (100-125 microns)
Theoretical coverage per gallon	700 mil. sq. ft. (16.5 sq. m./liter @ 25 microns)	720 mil sq. ft. (17 sq. m/liter @ 25 microns)
Application temperature @ 50% RH	50°F-120°F (10°C-50°C)	50°F-120°F (10°-50°C)
Drying time @ 50% R.H.	50°F (10°C) 70°F (21°C)	50°F (10°C) 70°F (21°C)
To touch	1 hour 30 minutes	1 hour 30 minutes
To recoat	12 hours 8 hours	12 hours 8 hours
To ship	48 hours 24 hours	48 hours 24 hours
Initial cure @ 350°F (177°C)**	30 minutes	30 minutes
Weight per gallon		
Thurmalox 242 Series	11.36±1lb. (5.15 kg.)	13±1lb. (5.26 Kg.)
Dampney 100 Thinner	9.0 lb. (4.1 kg.)	
Dampney 182 Thinner		8.5 lb. (3.9 Kg)
Flash point	81°F (27°C)	102°F (39°C)
Pot life	N/A	N/A
Shelf life	1 year	1 year
Volatile organic compounds	4.0 lb./gal. (479 g./l.) Standard	2.6 lb./gal. (312 g./l) VOC Version

** See Dry Time section

WARRANTY

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**Thurmalox® 245 Air Dry
Silicone Zinc Dust Primer
Heat Resistance 500°F - 1200°F**

Description

Thurmalox 245 Primer is a high temperature, corrosion resistant primer formulated from silicone resins and zinc dust. Thurmalox 245 Primer provides outstanding corrosion protection for metal surfaces operating at temperatures from 500°F (260°C) to 1000°F (538°C), with peaks to 1200°F (649°C). Thurmalox 245 is the primer for both Thurmalox 230 Series and Thurmalox 280 Aluminum heat resistant topcoats. These primer/topcoat systems have excellent intercoat adhesion and are able to withstand severe thermal shock throughout the entire temperature range.

Recommended Uses

- Stacks, Breechings, Boiler Casings
- Manifolds, Mufflers and Exhausts
- Hot Piping, Process Vessels, Heat Exchangers
- Refinery Equipment - Heaters, Crackers
- Furnaces, Ovens

Features

- Air dries
- Withstands continuous temperature of 1000°F (538°C), with peaks to 1200°F (648°C)
- Prevents rusting and streaking of steel during shutdowns
- Easily topcoated with Thurmalox 230 Series and Thurmalox 280 Aluminum topcoats
- Excellent intercoat adhesion
- Protects against weathering and corrosion
- Prevents underfilm corrosion attack

Not Recommended For

- Immersion service
- Interiors of stacks, breechings and scrubbers
- Stainless steel

Surface Preparation - 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.
3. Abrasive blast surface per specification SSPC-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5 - 2.0 mils maximum, with a 1.5 mil 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 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-SP 6, including the desired surface profile.
5. Feather out all edges of adjacent painted surfaces after completion of surface preparation operations and prior to application of the first coat of paint.

Mixing

Thurmalox 245 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 of the Base component with 3 parts Zinc Dust component.

Application Guidelines

Surface temperature must be at least 5°F (3°C) above dew point.

Uninsulated Carbon Steel

Primer: Thurmalox 245 Primer	1.5-2.0 mils (37-50 microns)
Topcoats: Thurmalox 230 Series	1.5-2.0 mils
Thurmalox 280 Aluminum	(37-50 microns)
<hr/>	
Total dry film thickness	3.0-4.0 mils (75-100 microns)

Bulletin 245

Application Equipment

Conventional spray is the recommended method of application. However, Thurmalox 245 Primer may also be applied by airless spray, brush or roller. Do not apply Thurmalox 245 Primer in heavier films than specified since blistering may occur.

Conventional Spray:

Spray gun	DeVilbiss MBC-510
Fluid tip	FX (1.1 mm tip)
Air cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	40-45 psi

* Smaller hose diameter or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips	163-614, 163-616 (12"fan)
Pump	Graco Bulldog 30:1
Fluid hose	3/8" ID
Air pressure to pump	65-80 psi

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 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.

Thinning

Only thin Thurmalox 245 Primer 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 245 Primer will air dry tack and thumb print free within 1/2-1 hour. Allow 8 hours dry time between coats. Allow 24 hours dry time prior to shipping and handling if coating is not heat cured. Surfaces coated with Thurmalox 245 Primer in the air dried state can be handled and shipped prior to a heat cure as long as

shipping and handling procedures for thin filmed systems are followed. Avoid mechanical abrasion during shipping and handling. 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 350°F (177°C) for 30 minutes. Equipment protected with the Thurmalox 245 Primer in the air dried state will heat cure when placed into service.

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 a 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 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

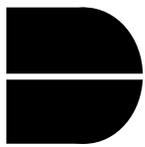
TECHNICAL DATA

Characteristics	Thurmalox 245 Primer
Generic Type	Silicone Zinc Dust
Color	Dark Gray
Number of components	Two
Temperature resistance	
Continuous	1000°F (538°C)
Intermittent	1200°F (648°C)
Percent (%) Solids by volume	33
Dry film thickness per coat	1.5 - 2.0 mils (37 - 50 microns)
Wet film thickness per coat	4.5 - 6.0 mils (112 - 150 microns)
Theoretical coverage per gallon	530 mil. sq. ft. (12.65 sq. m./liter @ 25 microns)
Application temperature @ 50% RH	50°F-120°F (10°C-50°C)
Drying time @ 50% RH	
To touch	50°F (10°C) 70°F (21°C)
To recoat	1 hour 30 minutes
To ship	12 hours 8 hours
Full cure @ 350°F (177°C)*	48 hours 24 hours
Weight per gallon	30 minutes
Thurmalox 245 Primer	12.0 lb. (5.5 kg.)
Dampney 100 Thinner	7.2 lb. (3.2 kg.)
Flash point (Pensky Martens)	45°F (7°C)
Pot life	N/A
Shelf life	1 year
Volatile organic compounds	4.9 lb./gal. (583 g./l.)

* See Dry Time section

WARRANTY

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Dampney

Protective Coatings

**Thurmalox® 245C Air Dry
VOC Compliant High Solid
Silicone Zinc Dust Primer
Heat Resistance 500°F - 1200°F**

Description

Thurmalox 245C Primer is a VOC compliant, high temperature, corrosion resistant primer formulated from silicone resins and zinc dust. Thurmalox 245C Primer provides outstanding corrosion protection for metal surfaces operating at temperatures from 500°F (260°C) to 1000°F (538°C), with peaks to 1200°F (648°C). Thurmalox 245C is the primer for Thurmalox 230C and 280C series heat resistant topcoats. The 245C primer/230C and 280C series topcoat systems have excellent intercoat adhesion and are able to withstand severe thermal shock from ambient to 1000°F (538°C).

Recommended Uses

Application where (1) the benefits and features of Thurmalox 245C are needed and where (2) federal, state, and/or local authorities require high temperature coatings to be compliant with reduced VOC (volatile organic compound) emissions regulations.

- Stacks, Breechings, Boiler Casings
- Manifolds, Mufflers and Exhausts
- Hot Piping, Process Vessels, Heat Exchangers
- Refinery Equipment - Heaters, Crackers
- Furnaces, Ovens

Features

- VOC compliant - 3.45 lb. / gal. (413 g./l.)
- Withstands continuous temperature of 1000°F (538°C), with peaks to 1200°F (648°C)
- Air dries
- Prevents rusting of steel during shutdowns
- Easily topcoated with Thurmalox 230C/280C series heat resistant topcoats
- Excellent intercoat adhesion
- Protects against weathering and corrosion
- Prevents underfilm corrosion attack

Not Recommended For

- Immersion service
- Interiors of stacks, breechings and scrubbers
- Stainless steel

Surface Preparation - 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-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5 - 2.0 mils maximum, with a 1.5 mil 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 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-SP 6, including the desired surface profile (anchor pattern).
5. Feather out all edges of adjacent painted surfaces after completion of surface preparation operations and prior to application of the first coat of paint.

Mixing

Thurmalox 245C Primer is a two package system consisting of a base component and zinc dust that must be 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 or nylon mesh bag. If a partial unit is needed, mix by weight, 10 parts Base component with 3 parts Zinc Dust component.

Application Guidelines

Surface temperature must be at least 5°F (3°C) above dew point.

Carbon Steel

Primer: Thurmalox 245C Primer	1.5-2.0 mils (37-50 microns)
Topcoats: Thurmalox 230C Series	1.5-2.0 mils (37-50 microns)
Total dry film thickness	3.0-4.0 mils (75-100 microns)

Application Equipment

Conventional spray is the recommended method of application. However, Thurmalox 245C Primer may also be applied by airless spray, or brush. Do not apply Thurmalox 245C Primer in heavier films than specified since blistering may occur.

Conventional Spray:

Spray gun	DeVilbiss JGA402 or equal
Fluid tip	EF
Air cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	60 psi

Provide material pot with agitator, regulators for fluid and air pressure, and oil and moisture traps in supply line.

*Smaller hose diameter or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips*	163-610, 163-315
Pump	Graco Bulldog 30:1
Fluid hose	3/8" to 1/2" ID
Air press. to pump	100 psi
Pump operating press.	80-90 psi

* Use Reverse-A-Clean® tips for fast, easy clean out.

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.

Thinning

Only thin Thurmalox 245C Primer with Dampney 180 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.

Provide material pot with agitator, regulators for fluid and air pressure, and oil and moisture traps in supply line.

Dry Time 70°F (21°C) 50% RH

Thurmalox 245C Primer will air dry tack and thumb print free within 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 245C Primer in the air dried state can be handled and shipped prior to a heat cure as long as shipping and handling procedures for thin filmed systems are followed. Avoid mechanical abrasion during shipping and handling. 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 350°F (177°C) for 30 minutes. Equipment protected with the Thurmalox 245C Primer in the air dried state will heat cure when placed into service.

Cleanup

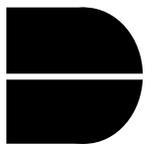
Thoroughly flush spray equipment and hoses immediately after use with Dampney 100 Thinner. Dismantle spray equipment and clean parts, brushes and rollers with Dampney 100 Thinner.

Storage

Store in a 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 Material Safety Data Sheet (MSDS) for complete precautionary and disposal information.



Dampney

Protective Coatings

Thurmalox[®] 260 Air Dry Series **Heat and Corrosion Resistant to 500°F** **Standard and Custom Colors** **Apply Directly to Hot Steel**

Description

Thurmalox 260 series coatings are air drying, self-priming, heat and corrosion resistant coatings based on a silicone copolymer resin and a highly effective corrosion inhibitive pigment system. Thurmalox 260 series coatings are designed for application to ambient temperature metal surfaces or directly to hot metal surfaces up to 500°F (260°C) of operating equipment. They provide a tough, chemically resistant, durable finish with excellent film integrity and color stability. Thurmalox 260 series coatings protect metal surfaces from corrosion and weathering up to 500°F (260°C), with peaks to 600°F (315°C). Thurmalox 260 series coatings are available in a wide range of standard (see Master Color Card) and custom colors.

Recommended Uses

- 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
- Heat resistant to 500°F (260°C), with peaks to 600°F (315°C)
- Excellent corrosion, chemical and weather resistance
- Direct application to metal surfaces as hot as 500°F only when applied by spray
- Outstanding color stability to 500°F (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 260 series black and aluminum-pigmented coatings are the only colors that are not self-priming. Apply any other Thurmalox 260 series coating as a prime coat.

Not Recommended For

- Direct application to surfaces having a surface temperature above 500°F (260°C)
- Immersion service
- Interiors of stacks, breechings and scrubbers

Surface Preparation - 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-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5-2.0 mils maximum. 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-SP 6, including the desired surface profile.
5. Feather out all edges of adjacent painted surfaces 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.

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

Surface temperature must be at least 5°F (3°C) above dew point.

Carbon Steel

Primer: Thurmalox 260 Series*	2.0 - 2.5 mils (50-62 microns)
Topcoat: Thurmalox 260 Series	2.0 - 2.5 mils (50-62 microns)
<hr/> Total dry film thickness	<hr/> 4.0 - 5.0 mils (100 - 125 microns)

*Thurmalox 260 series black and aluminum pigmented coatings are the only colors that are not self priming. Apply any of the other 260 series coatings as a prime coat.

Uninsulated Stainless Steel*

For optimum protection apply two coats of Thurmalox 262 Black to a dry film thickness of 2.0-2.5 mils (50-62 microns) per coat. Total recommended dry film thickness is 4.0-5.0 mils (100-125 microns).

*For application of other Thurmalox 260 series colors to uninsulated stainless steel consult Dampney Technical Service.

Application Equipment

Conventional spray is the recommended method of application. However, Thurmalox 260 series coatings may also be applied by airless spray, brush or roller. Do not apply Thurmalox 260 series coatings in heavier films than specified since blistering may occur.

Conventional Spray:

Spray gun	DeVilbiss MBC-510 or equal
Fluid tip	AV115-FX (0.0425")
Air cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	40-45 psi

*Smaller hose diam. or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips	163-614, 163-616 (12" fan)
Pump	Graco Bulldog 30:1
Fluid hose	3/8" ID
Air press. to pump	65-80 psi

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 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 260-series coatings is not normally required 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 260 series coatings. A fire hazard may result from use of solvents with low auto ignition temperatures when applying Thurmalox 260 series coatings to hot surfaces, 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. Excessive thinning will cause runs or sags.
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/or 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 over spray.
- 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 350°F-400°F (177°C-204°C) reduce tip size to 0.036 in. or 0.032 in.

Thinning

Only thin Thurmalox 260 series coatings with Dampney 162 Thinner.

Note: Use of other thinner not approved by Dampney may hinder product performance and void product warranty. Also see Procedures for Application to Hot Surfaces.

Dry Time 70°F (21°C) 50% RH

Thurmalox 260 series coatings will air dry tack and thumb print free within 4 - 6 hours. Allow 8-10 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 260 series 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 350°F (177°C) for 30 minutes.

Equipment protected with Thurmalox 260 series coatings in the air-dried state will heat cure when placed into service.

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 a 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 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

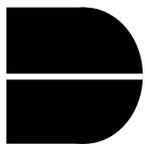
TECHNICAL DATA

Characteristics	Thurmalox 260 Series Coatings	
Generic Type	Silicone copolymer	
Color	See Master Color Card. Also available in custom colors.	
Temperature resistance		
Continuous	500°F (260°C)	
Intermittent	600°F (315°C)	
Percent (%) Solids by volume	52	
Dry film thickness per coat	2.0 - 2.5 mils (50 - 62 microns)	
Wet film thickness per coat	4.0 - 5.0 mils (100 - 125 microns)	
Theoretical coverage	834 mil. sq. ft. per gallon 20.0 sq. m. @ 25 microns per liter	
Application temperature @ 50% RH	50°F-500°F (10°C-260°C)	
Drying time @ 50% RH	50°F (10°C)	70°F (21°C)
To touch	6-8 hours	4-6 hours
To recoat	10-12 hours	8-10 hours
To ship	72 hours	48 hours
Full cure @ 350°F (177°C)*	30 minutes	
Weight per gallon		
Thurmalox 260 Series	13.4 lb. (6.0 kg.)	
Dampney 162 Thinner	6.8 lb. (3.1 kg.)	
Dampney 170 Thinner	8.0 lb. (3.7 kg.)	
Dampney 100 Thinner	7.2 lb. (3.2 kg.)	
Flash point	134°F (57°C)	
Pot life	N/A	
Shelf life	1 year	
Volatile organic compounds	3.3 lb./gal. (395.5 g./l.)	

* See Dry Time section

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.**



Dampney

Protective Coatings

**Thurmalox[®] 260C Air Dry Series
VOC Compliant Self Priming
Standard and Custom Colors to 500°F
Apply Direct 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 surfaces or directly to hot metal surfaces up to 500°F (260°C) of operating equipment*. They provide a tough, chemically resistant, durable finish with excellent film integrity and color stability. Thurmalox 260C series coatings protect metal surfaces from corrosion and weathering up to 500°F (260°C), with peaks to 600°F (315°C). Thurmalox 260C series coatings are available in a wide range of standard (see Master Color Card) and custom colors.

* Thurmalox 264C Aluminum is the only Thurmalox 260C series color which may not be applied to hot surfaces above 200°F (93°C).

Recommended Uses

Application to surfaces where (1) the benefits of Thurmalox 260C 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.

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

Features

- VOC compliant - 3.2 lb. / gal. (381 g./l.)
- Self priming *
- Air dries, easily applied
- Heat resistant to 500°F (260°C) with peaks to 600°F (315°C)

- Excellent corrosion, chemical and weather resistance
- Direct application to metal surfaces as hot as 500°F
- Outstanding color stability to 500°F (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 and aluminum pigmented coatings are the only colors that are not self priming. Apply any other Thurmalox 260C series coating as a prime coat.

Not Recommended For

- Continuous exposure to temperatures above 500°F (260°C)
- Direct application to surfaces having a surface temperature above 500°F (260°C)
- Immersion service
- Interiors of stacks, breechings and scrubbers

Surface Preparation - 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-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5-2.0 mils maximum. 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-SP 6, including the desired surface profile (anchor pattern).

5. Feather out all edges of adjacent painted surfaces 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.

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

Surface temperature must be at least 5°F (3°C) above dew point.

Uninsulated Carbon Steel

Primer: Thurmalox 260C Series*	2.0 - 2.5 mils (50-62 microns)
Topcoat: Thurmalox 260C Series	2.0 - 2.5 mils (50-62 microns)
<hr/> Total dry film thickness	<hr/> 4.0 - 5.0 mils (100 - 125 microns)

*Thurmalox 260C series black and aluminum pigmented coatings are the only colors that are not self priming. Apply any of the other 260C series coatings as a prime coat.

Uninsulated Stainless Steel*

For optimum protection apply two coats of Thurmalox 260C to a dry film thickness of 2.0-2.5 mils (50-62 microns) per coat. Total recommended dry film thickness is 4.0-5.0 mils (100-125 microns).

*For application of other Thurmalox 260C series colors to uninsulated stainless steel consult Dampney Technical Service.

Application Equipment

Conventional spray is the recommended method of application, however Thurmalox 260C series coatings may also be applied by airless spray, brush or roller. Do not apply Thurmalox 260C series coatings in heavier films than specified since blistering may occur.

Conventional Spray:

Spray gun	DeVilbiss JGA402 or equal
Fluid tip	EF
Air cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	60 psi

Provide material pot with agitator, regulators for fluid and air pressure, and oil and moisture traps in supply line.

*Smaller hose diam. or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips*	163-610, 163-315
Pump	Graco Bulldog 30:1
Fluid hose	3/8" to 1/2" ID
Air press. to pump	100 psi
Pump operating press.	80-90 psi

* Use Reverse-A-Clean® tips for fast, easy clean out.

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 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. Flush spray equipment with Dampney 100 Thinner before use.
2. Thinning of Thurmalox 260C series coatings is not normally required for spray and roller application. For brush or roller application, use up to 1/2 pint maximum of Dampney 167 Thinner per gallon of coating.
3. Dampney 167 Thinner is formulated especially for application to hot surfaces.
4. WARNING! DO NOT use any other solvents to thin Thurmalox 260C series coatings. A fire hazard may result from use of solvents with low auto

Bulletin 260C

ignition temperatures when applying Thurmalox 260C series coatings to hot surfaces, and rapid solvent evaporation can cause dry spray and poor film characteristics.

5. Use Dampney 167 Thinner cautiously. Addition of a small amount of thinner will cause a great reduction in coating viscosity. Excessive thinning will cause runs or sags.
6. For conventional spray use adequate air pressure and volume to obtain proper atomization.

* Note: Thurmalox 264C Aluminum is the only Thurmalox 260C series color which may not be applied to hot surfaces above 200°F.

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/or 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 over spray.

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.

Thinning

Only thin Thurmalox 260C series coatings with Dampney 167 Thinner. Do not thin beyond federal, state and/or local VOC (volatile organic compound) emission regulations. Note: Use of other thinner not approved by Dampney may hinder product performance and void product warranty. Also see Procedures for Application to Hot Surfaces.

Dry Time at 70°F (21°C) 50% RH

Thurmalox 260C series coatings will air dry tack and thumb print free within 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 series in the air dried state can be handled and shipped prior to a heat cure as long as shipping and handling procedures for

thin filmed systems are followed. Avoid mechanical abrasion during shipping and handling. 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 350° F (177° C) for a 1/2 hour. Equipment protected with the Thurmalox 260C series coatings in the air dried state will heat cure when placed into service.

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.

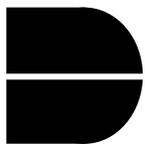
Precautionary Information

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 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



**Thurmalox® 260C TIC Air Dry Series
VOC Compliant Self Priming
Temperature Indicating Coatings**

Description

A heat-resistant, VOC compliant, silicone-copolymer coating designed primarily for temperature indicating applications in the 400°F-650°F (200°C-325°C) range. When applied to refinery and petrochemical process equipment operating at elevated temperatures, the color change provided by Thurmalox 260C-TIC gives an early warning of vessel overheating due to failure of refractory linings or bypassing of hot gases.

From ambient temperature to point of failure Thurmalox 260C-TIC maintains a high degree of color stability. Generally color changes occur over a temperature range of 25°F-50°F depending on specific formulation.

Recommended Uses

- Provides an early warning indicator of process vessel overheating due to gas bypassing or refractory failure
- Provides an early warning indicator of temperature conditions conducive to hydrogen attack of carbon or low alloy steels in high pressure/high temperature refinery and petrochemical processes utilizing hydrogen-rich atmospheres

Features

- Good weathering and UV stability
- Very sharp, easily seen color change from 25 CIE Lab scale Delta E units
- Outstanding application and performance properties as with other Thurmalox 260C TIC series coatings
- Primer not required - contains same corrosion inhibitive pigment system as other 260C TIC series coatings.
- VOC compliance - 3.2 lb/gal (383 g/l)

Color/ Temperature Summary

267C-30	Yellow	475-525°F
269C-42	Blue	675-725°F

Surface Preparation - 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-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5-2.0 mils maximum. 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-SP 6, including the desired surface profile (anchor pattern).
5. Feather out all edges of adjacent painted surfaces 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.

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 – Uninsulated Stainless Steel*

For optimum protection apply two coats of Thurmalox 260C TIC to a dry film thickness of 2.0-2.5 mils (50-62 microns) per coat. Total recommended dry film thickness is 4.0-5.0 mils (100-125 microns).

*For application of other Thurmalox 260C TIC series colors to uninsulated stainless steel consult Dampney Technical Service.

Application Equipment

Conventional spray is the recommended method of application. However, Thurmalox 260C TIC series coatings may also be applied by airless spray, brush or roller. Do not apply Thurmalox 260C TIC series coatings in heavier films than specified since blistering may occur.

Conventional Spray:

Spray gun	DeVilbiss JGA402 or equal
Fluid tip	EF
Air cap	704
Fluid hose	3/8" ID
Air hose	5/16" ID
Atomizing pressure	60 psi

Provide material pot with agitator, regulators for fluid and air pressure, and oil and moisture traps in supply line. Smaller diameter hose may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips*	163-610, 163-315
Pump	Graco Bulldog 30:1
Fluid hose	3/8" to 1/2" ID
Air pressure to pump	100 psi
Pump operating pressure	80-90 psi

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 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.

Thinning

Only thin Thurmalox 260C TIC series coatings with Dampney 162 Thinner. Do not thin beyond federal, state and/or local VOC (volatile organic compound) emission regulations. Note: Use of other thinner not approved by Dampney may hinder product performance and void product warranty. Also see Procedures for Application to Hot Surfaces.

Dry Time at 70°F (21°C) 50% RH

Thurmalox 260C TIC series coatings will air dry tack and thumb print free within 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 TIC series in the air dried state can be handled and shipped prior to a heat cure as long as shipping and handling procedures for thin filmed systems are followed. Avoid mechanical abrasion during shipping and handling. 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 350°F (177°C) for 1/2 hour. Equipment protected with the Thurmalox 260C TIC series coatings in the air dried state will heat cure when placed into service.

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 a 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

Bulletin 260C TIC

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 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

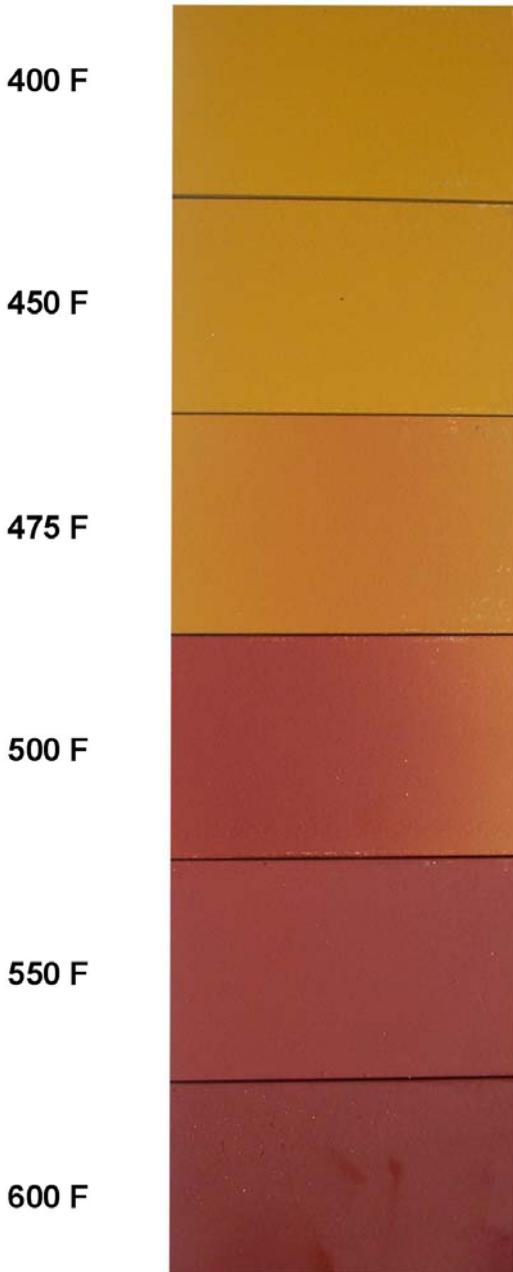
Characteristics	Thurmalox 260C TIC Series Coatings
Generic Type	Silicone copolymer
Color	Yellow, Blue
Temperature resistance	
Continuous	500°F (260°C)
Intermittent	600°F (315°C)
Percent (%) Solids by volume	Varies by color (average 52%)
Dry film thickness per coat	2.0 - 2.5 mils (50 - 62 microns)
Wet film thickness per coat	3.5 - 4.0 mils (87 - 100 microns)
Theoretical coverage per gallon	786 mil. sq. ft. (19 sq. m./liter @ 25 microns)
Application temperature @ 50% RH	50°F-500°F (10°C-260°C)
Drying time @ 50% RH	
To touch	50°F (10°C) 70°F (21°C)
To recoat	10-12 hours 6-8 hours
To ship	24 hours 10-12 hours
Full cure @ 350°F (177°C)*	72 hours 48 hours
Weight per gallon	30 minutes
Thurmalox 260C TIC Series	13.5 lb. (6.1 kg.)
Dampney 162 Thinner	6.8 lb. (3.1 kg.)
Dampney 170 Thinner	8.0 lb. (3.7 kg.)
Dampney 100 Thinner	7.2 lb. (3.2 kg.)
Flash point	134°F (57°C)
Pot life	N/A
Shelf life	1 year
Volatile organic compounds	3.2 lb./gal. (381 g./l.)

* See Dry Time section

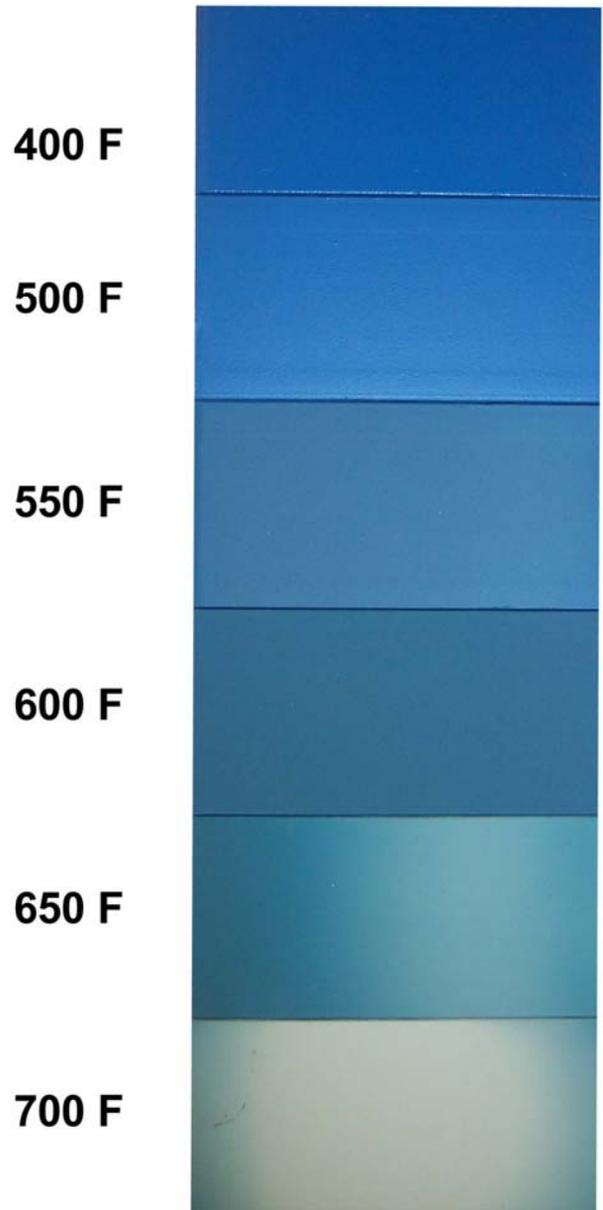
WARRANTY: Dampney protective coating products are expressly warranted to meet applicable technical and quality specifications. The technical data contained herein are accurate at the date of issuance but are subject to change without prior notification. No warranty of current accuracy is hereby given 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.**

Color changes at increasing temperatures:

Yellow (267C-30)



Blue (269C-42)





**Thurmalox® 280 Aluminum
Air Dry Silicone Coating
Heat Resistance 500°F - 1200°F**

Description

Thurmalox 280 Aluminum is an air drying, heat resistant coating based on silicone resins formulated specifically to protect metal surfaces operating at temperatures from 500°F (260°C) to 1200°F (648°C). For maximum corrosion protection, metal surfaces should be primed with Thurmalox 245 silicone zinc dust heat and corrosion resistant primer and topcoated with Thurmalox 280 Aluminum. The 245 primer/280 topcoat system provides outstanding adhesion, film integrity, corrosion-, weathering- and thermal shock-resistance throughout this entire temperature range.

Recommended Uses

- Stacks, Breechings, Boiler Casings
- Refinery Equipment - Heaters, Crackers
- Reformers
- Furnaces, Kilns, Ovens
- Compressors, Turbines, Engines
- Piping, Pumps, Manifolds
- Process Vessels, Heat Exchangers

Features

- Air Dries
- Withstands continuous temperature of 1200°F (648°C)
- Outstanding heat and weathering resistance
- Easy to apply system
- Outstanding resistance to thermal shock

Not Recommended For

- Immersion service
- Interiors of stacks, breechings and scrubbers

Surface Preparation - 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-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5 - 2.0 mils maximum. 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-SP 6, including the desired surface profile (anchor pattern).
5. Feather out all edges of adjacent painted surfaces after completion of surface preparation operations and prior to application of the first coat of paint.

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 - Carbon Steel

Surface temperature must be at least 5°F (3°C) above dew point.

Primer: Thurmalox 245 Primer	1.5-2.0 mils (37-50 microns)
Topcoat: Thurmalox 280 Aluminum	1.5-2.0 mils (37-50 microns)
Total dry film thickness	3.0-4.0 mils (75-100 microns)

Application Equipment

Conventional spray is the recommended method of application. However, Thurmalox 280 Aluminum may also be applied by airless spray, brush or roller. Do not apply Thurmalox 280 Aluminum in heavier films than specified since blistering may occur.

Conventional Spray:

Spray gun	DeVilbiss MBC-510 or equal
Fluid tip	AV115-FX (0.0425")
Air cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	40-45 psi

*Smaller hose diameter or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips	163-614, 163-616 (12" fan)
Pump	Graco Bulldog 30:1
Fluid hose	3/8" ID
Air press. to pump	65-80 psi

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 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.

Thinning

Only thin Thurmalox 280 Aluminum 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 280 Aluminum will air dry tack and thumb print free within 1/2-1 hour. Allow 8 hours dry time between coats. Allow 24 hours dry time prior to shipping and handling if coating is not heat cured. Surfaces coated with Thurmalox 280 Aluminum in the air-dried state can be handled and shipped prior to a

heat cure as long as shipping and handling procedures for thin-filmed systems are followed. Avoid mechanical abrasion during shipping and handling. 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 350°F (177°C) for 30 minutes. Equipment protected with Thurmalox 280 Aluminum in the air-dried state will heat cure when placed into service.

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 a 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 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

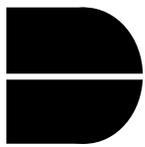
TECHNICAL DATA

Characteristics	Thurmalox 280 Aluminum	
Generic Type	Silicone	
Color	Aluminum	
Temperature resistance	1200°F (649°C)	
Continuous	25	
Percent (%) Solids by volume	1.5 - 2.0 mils (37 - 50 microns)	
Dry film thickness per coat	6.0 - 8.0 mils (150 - 200 microns)	
Wet film thickness per coat	401 mil. sq. ft. per gallon	
Theoretical coverage	9.6 sq. m. @ 25 microns per liter	
Application temperature @ 50% RH	50°F-120°F (10°C-50°C)	
Drying time @ 50% RH	50°F (10°C)	70°F (21°C)
To touch	1 hour	30 minutes
To recoat	12 hours	8 hours
To ship	48 hours	24 hours
Full cure @ 350°F (177°C)*	30 minutes	
Weight per gallon		
Thurmalox 280 Aluminum	9.6 lb. (4.3 kg.)	
Dampney 100 Thinner	7.2 lb. (3.2 kg.)	
Flash point	45°F (7°C)	
Pot life	N/A	
Shelf life	1 year	
Volatile organic compounds	5.3 lb./gal. (630 g./l.)	

* See Dry Time section

WARRANTY

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**Thurmalox® 280C Aluminum Air Dry
VOC Compliant Silicone Coating
Heat Resistance 500°F - 1200°F**

Description

Thurmalox 280C Aluminum is a VOC compliant, air drying, heat resistant coating based on silicone resins formulated specifically to protect metal surfaces operating at temperatures from 500°F (260°C) to 1200°F (648°C). For maximum corrosion protection, metal surfaces should be primed with Thurmalox 245C silicone zinc dust heat and corrosion resistant primer and topcoated with Thurmalox 280C Aluminum. The 245C primer/280C topcoat system provides outstanding adhesion, film integrity, corrosion-, weathering- and thermal shock-resistance throughout this entire temperature range.

Recommended Uses

- 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 – 3.5 lb/gal (419 g/L)
- Air Dries
- Withstands continuous temperature of 1200°F (648°C)
- Outstanding heat and weathering resistance
- Easy to apply system
- Outstanding resistance to thermal shock

Not Recommended For

- Immersion service
- Interiors of stacks, breechings and scrubbers

Surface Preparation - 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-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.0 - 2.0 mils maximum, with a 1.5 mil 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 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-SP 6, including the desired surface profile (anchor pattern).
5. Feather out all edges of adjacent painted surfaces after completion of surface preparation operations and prior to application of the first coat of paint.

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 - Carbon Steel

Surface temperature must be at least 5°F (3°C) above dew point.

Primer: Thurmalox 245C Primer	1.5-2.0 mils (37-50 microns)
Topcoat: Thurmalox 280C Aluminum	1.5-2.0 mils (37-50 microns)
<hr/> Total dry film thickness	<hr/> 3.0-4.0 mils (75-100 microns)

Application Equipment

Conventional spray is the recommended method of application. However, Thurmalox 280C Aluminum may also be applied by airless spray, brush or roller. Do not apply Thurmalox 280C Aluminum in heavier films than specified since blistering may occur.

Conventional Spray:

Spray gun	DeVilbiss MBC-510 or equal
Fluid tip	AV115-FX (0.0425")
Air cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	40-45 psi

*Smaller hose diameter or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips	163-614, 163-616 (12" fan)
Pump	Graco Bulldog 30:1
Fluid hose	3/8" ID
Air press. to pump	65-80 psi

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 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.

Thinning

Only thin Thurmalox 280C Aluminum with Dampney 180 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.

Dry Time 70°F (21°C) 50% RH

Thurmalox 280C Aluminum will air dry tack and thumb print free within 1/2-1 hour. Allow 8 hours dry time between coats. Allow 24 hours dry time prior to shipping and handling if coating is not heat cured. Surfaces coated with Thurmalox 280C Aluminum in the air-dried state can be handled and shipped prior to a

heat cure as long as shipping and handling procedures for thin-filmed systems are followed. Avoid mechanical abrasion during shipping and handling. 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 350°F (177°C) for 30 minutes. Equipment protected with Thurmalox 280C Aluminum in the air-dried state will heat cure when placed into service.

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 a 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 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

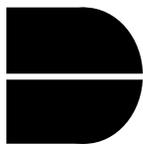
TECHNICAL DATA

Characteristics	Thurmalox 280C Aluminum	
Generic Type	Silicone	
Color	Aluminum	
Temperature resistance	1200°F (649°C)	
Continuous	32	
Percent (%) Solids by volume	1.5 - 2.0 mils (37 - 50 microns)	
Dry film thickness per coat	4.5 - 6.3 mils (110 – 150 microns)	
Wet film thickness per coat	510 mil. sq. ft. per gallon	
Theoretical coverage	12 sq. m. @ 25 microns per liter	
Application temperature @ 50% RH	50°F-120°F (10°C-50°C)	
Drying time @ 50% RH	50°F (10°C)	70°F (21°C)
To touch	1 hour	30 minutes
To recoat	12 hours	8 hours
To ship	48 hours	24 hours
Full cure @ 350°F (177°C)*	30 minutes	
Weight per gallon		
Thurmalox 280C Aluminum	12.3 lb. (5.6 kg.)	
Dampney 180 Thinner	7.5 lb. (3.4 kg.)	
Dampney 100 Thinner	7.2 lb. (3.2 kg.)	
Flash point	45°F (7°C)	
Pot life	N/A	
Shelf life	1 year	
Volatile organic compounds	3.3 lb./gal. (396 g./l.)	

* See Dry Time section

WARRANTY

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**Thurmalox® 2600 Air Dry Series
Self Priming Baghouse Coating
Heat and Corrosion Resistant to 600°F**

Description

Thurmalox 2600 series coatings are VOC compliant high performance silicone coatings formulated for the protection of the interior surfaces of baghouses and other air pollution control equipment exposed to a combination of high temperatures and aggressive environments. Thurmalox 2600 series coatings are designed to protect metal surfaces operating at temperatures up to 600°F (315°C). They provide a tough, chemical and abrasion resistant film with excellent thermal shock properties. Consult Dampney Technical Service on all projects when applying and/or specifying Thurmalox 2600 series coatings.

Recommended Uses

- Interior walls of boilers and furnaces
- Interior surfaces of breechings, ducts and stacks
- Insulated surfaces (carbon and stainless steel)
- Dry scrubbers

Features

- Air dries and self priming
- Excellent heat, corrosion and chemical resistance
- Resistant to thermal shock and cycling temperatures
- VOC Compliance - 3.5 lb./gal (420 g./l.)
- Forms a tough, abrasion resistant film

Not Recommended For

- Continuous exposure to temperatures above 600°F (315°C)
- Immersion service

Surface Preparation - 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-SP 10, "Near-White Blast Cleaning", or per NACE Standard No. 2 to a profile depth of 1.5-2.5 mils maximum. Abrasive used in blasting should be selected carefully from materials of mesh size required to produce the desired anchor pattern.

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 - Carbon Steel

Surface temperature must be at least 5°F (3°C) above dew point.

Primer: Thurmalox 2600-00 Off White	4.0 - 5.0 mils (100-125 microns)
Midcoat: Thurmalox 2600-0108 Lt. Gray	4.0 - 5.0 mils (100-125 microns)
Finish: Thurmalox 2600-00 Off White	4.0 - 5.0 mils (100-125 microns)
<hr/>	
Total dry film thickness	12 - 15 mils (300 - 375 microns)

Application Equipment

Thurmalox 2600 series coatings can be applied using conventional or airless spray equipment. Do not apply Thurmalox 2600 series coatings in heavier film than specified since blistering may occur.

Conventional Spray:

Spray gun	DeVilbiss JGA402 or equal
Fluid tip	EF
Air Cap	704
Fluid hose*	3/8" ID
Air hose	5/16" ID
Atomizing pressure	60 psi

Provide material pot with agitator, regulators for fluid and air pressure, and oil and moisture traps in supply line.

Bulletin 2600

*Smaller hose diameter or length over 25 ft. may require increased pressure.

Airless Spray:

Spray gun	Graco 205-591, 208-663
Fluid tips*	163-610, 163-315
Pump	Graco Bulldog 30:1
Fluid hose	3/8" to 1/2" ID
Air pressure to pump	100 psi
Pump operating pressure	80-90 psi

*Use Reverse-A-Clean® tips for fast, easy clean out.

Application Procedures

1. Flush spray equipment with Dampney 160 Thinner before use.
2. Thinning of Thurmalox 2600 series coatings is not normally required for spray application. If required for brush or roller application, use up to $\frac{1}{2}$ pint maximum of Dampney 160 Thinner per gallon of coating.
3. DO NOT use any other solvents to thin 2600 series coatings. Incompatibility may result and too rapid solvent evaporation can cause dry spray and poor film characteristics.
4. Use Dampney 160 Thinner cautiously. Addition of a small amount of thinner will cause a great reduction in coating viscosity. Excessive thinning will cause runs or sags.
5. For conventional spray use adequate air pressure and volume to obtain proper atomization.

Thinning

Only thin Thurmalox 2600 series coatings with Dampney 160 Thinner. Do not thin beyond federal, state and/or local VOC (volatile organic compound) emission regulations. Note: Use of other thinner not approved by Dampney may hinder product performance and void product warranty.

Dry Time 70°F (21°C) 50% RH

Thurmalox 2600 series coatings will air dry tack and thumb print free within 6-8 hours. Allow 12-16 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 2600 series in the air dried state can be handled and shipped prior to a heat cure as long as shipping and handling procedures for thin filmed systems are followed. Avoid mechanical abrasion during shipping and handling. 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 350°F (177°C) for 30 minutes. Equipment protected with the Thurmalox 2600 series coatings in the air-dried state will heat cure when placed into service.

Cleanup

Thoroughly flush spray equipment and hoses immediately after use with Dampney 160 Thinner. Dismantle spray equipment and clean parts, brushes and rollers with Dampney 160 Thinner.

Storage

Store in a 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 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

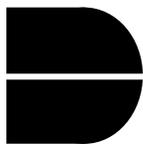
TECHNICAL DATA

Characteristics	Thurmalox 2600 Series Coatings	
Generic Type	Silicone	
Color	Off-white, light-gray	
Temperature resistance	600°F (316°C)	
Continuous	56	
Percent (%) Solids by volume	4.0 - 5.0 mils (100 - 125 microns)	
Dry film thickness per coat	7.0 - 9.0 mils (175 - 225 microns)	
Wet film thickness per coat	898 mil. sq. ft. per gallon	
Theoretical coverage	21.5 sq. m. @ 25 microns per liter	
Application temperature @ 50% RH	50°F-120°F (10°C-50°C)	
Drying time @ 50% RH	50°F (10°C)	70°F (21°C)
To touch	10-12 hours	6-8 hours
To recoat	24 hours	12-16 hours
To ship	72 hours	48 hours
Full cure @ 350°F (177°C)*	30 minutes	
Weight per gallon	11.5 lb. (5.21 kg.)	
Thurmalox 2600 Series	8.1 lb. (3.6 kg.)	
Dampney 160 Thinner	134°F (57°C)	
Flash point	N/A	
Pot life	1 year	
Shelf life	3.5 lb./gal. (420 g./l.)	
Volatile organic compounds		

* See Dry Time section

WARRANTY

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Thurmalox[®] 2655 High Temperature RTV Silicone Adhesive/Sealant

Description

Thurmalox 2655 is a one-part, room temperature vulcanizing (RTV) silicone adhesive/sealant for high-temperature industrial applications. It cures to a tough, elastomeric rubber upon exposure to atmospheric moisture and retains permanent flexibility from -80°F to 550°F (-62°C-288°C) and will withstand intermittent exposures to 650°F (343°C).

Recommended Uses

Thurmalox 2655 Adhesive/Sealant provides excellent adhesion to most surfaces including: metals, painted surfaces, ceramics, glass, rubber and plastics. Typical applications include:

- Sealing hot surfaces of air pollution control equipment to prevent acid dew point corrosion caused by in-leakage of moist ambient air
- For baghouses, precipitators, access doors, expansion joints, vent and flue connections, duct work, damper seals and test ports
- Fired heaters, boilers, ovens, windows
- Prevention of dust and dirt contamination of electrical controls, instruments and motors
- Stoves, fireplace inserts and flue pipes
- Formed-in-place gaskets around pipes, valves, process equipment and tanks containing hot liquids
- Formed-in-place gaskets for compressors, pumps, engines, gear boxes and other machinery

Features

- 100% silicone rubber
- Outstanding thermal stability over a wide service temperature range
- Retains permanent flexibility under stress by heat, radiation and weather
- Unaffected by weather, moisture, UV radiation and ozone
- Highly resistant to chemical attack
- Excellent unprimed adhesion to many materials
- Will not sag, slump or run upon application
- Excellent dielectric and insulation properties

Not Recommended For

- Spaces that will be totally confined during cure as sealant requires atmospheric moisture to initiate the curing reaction. Under such conditions full cure will not take place and sealant will be subject to softening at elevated temperatures.
- Galvanized surfaces
- Porous surfaces

- Surfaces in continuous water immersion
- Surfaces that might bleed oils, plasticizers or solvents
- Surfaces subject to direct flame contact
- Application to painted surfaces. Paint film will not stretch with extension of sealant and may crack and peel.

Specification Compliance

Thurmalox 2655 sealant meets or exceeds the requirements of the following specifications:

- Federal Specification TT-S-001543A, Class A
- Federal Specification TT-S-00230C, Class A
- MIL-A-46106B, Group II Type I, Group III Type I
- ASTM C 920 Type S, Grade NS, Class 25 use NT, G and A
- Canadian Specification CAN 19.13-M82

Surface Preparation

Surfaces must be clean, dry and free from oil, grease, dirt, rust, moisture and other foreign matter. Mask adjacent surfaces to simplify cleanup.

Priming

Thurmalox 2655 sealant will bond to most clean surfaces without primers. A field or laboratory evaluation should always be made to determine adhesive strength for specific applications. Difficult-to-bond surfaces should be submitted to Dampney's laboratory for adhesion testing and primer evaluation. Apply recommended primer if required for increased adhesion. Priming is not required for surfaces previously painted with any Thurmalox heat and corrosion resistant coating.

Application Guidelines and Dry Time

Surface temperature must be at least 5°F (3°C) above dew point.

1. Sealant is supplied ready-to-use and will flow readily from its container under pressure.
2. Apply using manual or air-powered caulking gun after the joint has been properly prepared to receive the sealant.
3. Sealant begins to cure on contact with moisture in the air. At conditions of 77°F (25°C) and 50% RH a skin will begin to form on the exposed surface of the sealant within 15 minutes and the skin will become tack-free within 25-35 minutes. Cure progresses inwardly from the surface.
4. Tool surface immediately after application and before skin begins to form to ensure intimate contact with the substrate.

5. Wipe excess sealant from the surrounding areas and remove any masking tape before skin is formed.
6. Apply sealant between 1/8 in. and 1/2 in. thick maximum.
7. Cure time is affected by RH, temperature, degree of confinement and thickness of sealant.
8. High temperatures and high humidity accelerate the cure and low temperatures, low humidity and confined spaces will retard cure.
9. A 1/8 in. section will cure through in 24 hours at 77°F and 50% RH. Cure time increases with cross-sectional thickness of sealant.
10. Sealant releases acetic acid vapor during cure. Odor will disappear as cure progresses. Allow vapors to escape. If vapors are confined, cure time will be increased or cure may not be completed.

Cleanup

Uncured sealant can be removed with Dampney 100 Thinner. For cured sealant, strippers are available which will dissolve silicone rubber.

Storage

Store below 90°F (32°C) in a dry place. Sealant has a shelf life of 12 months stored in original, unopened containers.

Packaging

Available in 10.3 fl. oz. (305 ml) polyethylene cartridges, 12 cartridges per carton.

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 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 2655
Generic Type	100% Silicone
Consistency	Spreadable Paste
Color	Oxide Red
Application Rate (g./min.) 1/8 in. orifice, 100 psi	200 minimum
Tack-free Time	25-35 minutes
Tooling Time	20-25 minutes
Cure Time 1/8 in. thickness @ 77°F (25°C) and 50% RH	20-30 hours
Service Temperature – cured Continuous	-80°F - 550°F (62°C - 288°C)
Intermittent	650°F (343°C)
Durometer Hardness - Shore A	25-30
Tensile Strength	600 – 800 psi
Elongation (%)	600 – 800
Adhesion in Peel (psi)	60 minimum
Dielectric Strength (v./mil.)	570
Dielectric Constant @ 60 Hz	2.7 ± 0.3
Dissipation Factor @ 60 Hz	0.002 ± 0.0002
Volume Resistivity (ohm-cm)	2 X 10 ¹⁶ ± 10%

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.**



Lab-metal® One-part metal repair and patching compound

Description

Lab-metal is a ready-to-use, aluminum-filled repair and patching compound. Spreads like paste, hardens into metal. Adheres to metal, wood, plastic, glass, fiberglass, and more. Apply right from the can. No mixing of two parts, no measuring or heat required. Lab-metal can be milled, drilled, tapped, ground and sanded smooth. Will not shrink or crack. Water resistant, rustproof. Withstands heat to 350°F (up to 425°F for single exposures no longer than 20 minutes).

Recommended Uses

Fixes and protects virtually any worn or damaged surface.

- Used by plants, factories, plating shops, powder coaters, machine shops, DIY, foundries, pattern shops, OEMs, shipyards, marinas, boatyards, refineries, metal fabricators, ornamental metal workers, plumbers, auto restorers, HVAC, contractors and repair shops.

Features

- Withstands heat to 350°F (up to 425°F for single exposures no longer than 20 minutes)
- Excellent adhesion
- Excellent weather and abrasion resistance
- Ready-to-use formulation; no mixing or measuring or heat required.
- Doesn't peel or flake
- May be thinned for brush and spray applications
- Can be milled, chiseled, drilled, sawed, tapped, machined, ground, sanded and filed
- Will not shrink, chip, crack or peel and may be sanded to a feather edge

Surface Preparation

For best results, surface should be clean and dry (clean with Lab-solvent). Roughen surface to achieve optimal adhesion.

Application

Spread with putty knife. Thin with Lab-solvent to brush or spray.

Application temperature range: Room temperature during application and drying time.

Thinning

Thin with Lab-solvent.

Drying Time

Brush and spray applications dry very quickly. The depth of the application determines drying time. Under normal conditions, 1/16 inch will harden in one to two hours; 1/8 inch will harden in three to four hours; 3/8 inch will harden in four to six hours.

Storage

Store in a dry place at room temperature. For extended storage, add a capful of Lab-solvent to the unused Lab-metal and cover tightly after use.

Packaging

Available in the following sizes:

- 6 oz. (¼ pint can)
- 12 oz. (½ pint can)
- 24 oz. (pint can)
- 48 oz. (quart can)
- 192 oz. (gallon can)
- 960 oz. (5-gallon can)

TECHNICAL DATA

Lab-metal	
Description	Ready-to-use aluminum filled repair and patching compound. Single component dent and body filler / sealer.
Color	Metal gray. Aluminum when buffed.
Adhesion	Excellent adhesion to clean, dry surfaces of metal, hard plastics, and glass. Lab-metal may not be used as an adhesive.
Hardness	81 on Shore D scale
Coefficient of Linear Expansion	15 x 10 ⁶ inch / inch per °F
Strength	Tensile: 650 lb. / sq. in. Compressive: 20,000 psi Water: 50 psi
Specific Gravity	1.95 at 75°F
Weight	Cubic inch: 31.2 grams or 1.10 oz.
Heat Resistance	-40°F to 350°F (and single exposures to 425°F for no longer than 20 minutes)
Chemical Resistance	Not affected by mild acids, gasoline, petroleum, petroleum solvents, oil or L.P. gas. Alkalis will attack Lab-metal slowly, but only after extensive immersion.
Combustibility	Will not support combustion.
Conductivity	A nonconductor at normal voltage. Not considered an insulator. Accepts ground for powder coating.
Thermal conductivity	Est. 1-2 BTU per sq. ft., per hr., per °F
Mechanical Properties	Strong and durable. Can be milled, sawed, drilled, tapped, sanded, ground, filed. Does not shrink, chip, crack or peel.

WARRANTY

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Hi-Temp Lab-metal Metal repair and patching compound for temperatures to 1000°F

Description

Hi-Temp Lab-metal is a ready-to-use, aluminum-filled repair and patching compound. Applied directly from the can with a putty knife or similar tool, Hi-Temp Lab-metal adheres to metal, wood, plastic, glass, fiberglass, and more. Apply right from the can; no two-part mixing or measuring and no heat catalyst is required.

Many applications may be made from a single can. After each use, to prevent Hi-Temp Lab-metal from hardening in the can, pour a small amount of Lab-solvent over the remaining Hi-Temp Lab-metal contents, then cover tightly. (Stir the solvent into the Hi-Temp Lab-metal upon opening container.)

Recommended Uses

Hi-Temp Lab-metal is recommended where original Lab-metal may not withstand the extreme heat. Originally developed to meet foundries' core box repair needs, industries such as metalworking, powder coating, welding, fabricating, heating, construction, auto repair, die casting, mold refinishing, and sheet metal production and finishing use Hi-Temp Lab-metal. The repair compound is used on:

- * Foundry core boxes
- * Duct work
- * Radiators
- * Molds
- * Mufflers, exhaust systems, engines
- * Wood and coal burning stoves, grills, and industrial ovens
- * Dented metal, prior to powder coating

Features

- * Withstands heat to 1000°F (must be heat cured as directed)
- * Excellent adhesion
- * Excellent weather and abrasion resistance
- * Ready-to-use formulation -- no mixing, no measuring, no heat required
- * Does not peel or flake
- * Coatable with liquid or powder coatings
- * Can be thinned for brush applications
- * Can be machined, ground, filed and sanded to a smooth finish
- * Impervious to rust, rot and mildew
- * Not affected by varying climatic conditions

Surface Preparation

For best results, surface should be clean and dry (clean with Lab-solvent). Roughen surface to achieve optimal adhesion. Stir Hi-Temp Lab-metal before use. Thin with Lab-solvent if necessary.

Application

Spread with putty knife or similar tool. Thin with Lab-solvent as needed. When filling deep holes or cavities, the putty should be applied in thin layers, less than ¼ inch thick. Allow each layer to dry for at least 24 hours at room temperature, and heat harden prior to each additional coat. Heat cure at 425°F for one hour.

To apply Hi-Temp Lab-metal with a paint brush, it must be thinned to paint consistency with Lab-solvent, then applied with light brush strokes – not worked over as with paint. Dip the brush into Lab-solvent periodically to keep the bristles free and prevent clogging.

Application temperature range: Room temperature during application and drying time.

Thinning

Thin with Lab-solvent.

Drying Time

The depth of the application determines drying time; hardening occurs by exposure to air. Apply no thicker than ¼ inch per application. The application must air dry for 24 hours, or until the product has hardened to a metal state. It must then be heat cured (before applying a second coat.)

Storage

Store in dry place at room temperature. For extended storage, add a capful of Lab-solvent to the unused Hi-Temp Lab-metal and cover tightly after use.

Packaging

Hi-Temp Lab-metal is available in the following sizes:

- 14 oz. (½ pint can)
- 24 oz. (pint can)

TECHNICAL DATA

Hi-Temp Lab-metal	
Description	Ready-to-use aluminum filled repair and patching compound. Single component dent and body filler / sealer.
Color	Metal gray. Aluminum when buffed.
Adhesion	Excellent adhesion to clean, dry surfaces of metal, hard plastics, and glass. Hi-Temp Lab-metal cannot be used as an adhesive.
Hardness	81 on Shore D scale
Coefficient of Linear Expansion	15 x 10 ⁶ inch / inch per °F
Strength	Tensile: 650 lb. / sq. in. Compressive: 20,000 psi Water: 50 psi
Specific Gravity	1.95 at 75°F
Weight	Cubic inch: 31.2 grams or 1.10 oz.
Heat Resistance	1000°F (once heat hardened as directed)
Chemical Resistance	Not affected by mild acids, gasoline, petroleum, petroleum solvents, oil or L.P. gas. Alkalis will attack Hi-Temp Lab-metal slowly, but only after extensive immersion.
Combustibility	Will not support combustion.
Conductivity	A nonconductor at normal voltage. Not considered an insulator. Accepts ground for powder coating.
Thermal conductivity	Est. 1-2 BTU per sq. ft., per hr., per °F
Mechanical Properties	Strong and durable. Can be milled, sawed, drilled, tapped, sanded, ground, filed. Does not shrink, chip, crack or peel.

WARRANTY

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Dampney

Master Color Card



1-04 charcoal



13-22 warm brown*



13-11 chocolate brown*



5-05 OSHA red



1-09 standard gray



13-02 bark brown



5-20 hanover red



14-14 OSHA orange



1-08 light gray



0-070 bone white*



5-45 brick red*



7-07 OSHA yellow



1-07 spring gray*



0-11 andover white*



8-06 meadow green



8-08 OSHA green



1-25 gloucester gray*



13-21 canyon sand



8-28 vista green



9-09 OSHA blue



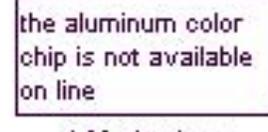
1-21 dawn gray



13-06 clay tan



8-18 green



the aluminum color chip is not available on line

4-00 aluminum



1-10 cirrus gray*



9-02 falls blue



9-72 blue*



9-26 raleigh blue*

Also available in clear, white, black and custom colors.

*Designates a non-standard color for Thurmalox High Temperature Coatings and requires a 10 gallon minimum purchase.

Note: Due to your monitors color reproduction abilities these chips represent only a very close approximation



Dampney[®] Protective Coatings

**THURMALOX[®]
HEAT RESISTANT COATINGS**

**APEXIOR
IMMERSION LININGS**

**ENDCOR / EPODUR[®]
MAINTENANCE COATINGS**

**ELASTOID[®]
ELASTOMERIC COATINGS**

**DYMACRYL[®]
CONCRETE STAIN AND
SEALERS**

**ALVIN
REPAIR & MAINTENANCE
PRODUCTS**

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Everett, Mass.
ADVANCED COATINGS SINCE 1917
www.Dampney.com**

THURMALOX[®] Heat Resistant Coatings Designed for the Petro-Chemical, Refining, Power Generation & Industrial OEM Markets

Primers:

THURMALOX 210* — A zinc dust silicone primer applied to un-insulated carbon steel surfaces with a maximum heat resistance of 500°F (260°C). Suitable finish coats for ThurmaloX 210/210C include ThurmaloX 200/200C and 260/260C series.

THURMALOX 225HD — A high build silicone primer applied to insulated and un-insulated carbon and stainless steel surfaces with a maximum heat resistance of 1200°F (649°C). ThurmaloX 225HD offers high build protection for deep profile blasted surfaces. Suitable finish coats for ThurmaloX 225HD include ThurmaloX 230/230C and 280/280C series.

THURMALOX 245* — A zinc dust silicone primer applied to un-insulated carbon steel surfaces with a maximum heat resistance of 1200°F (649°C). Suitable finish coats for ThurmaloX 245/245C include ThurmaloX 230/230C and 280/280C series.

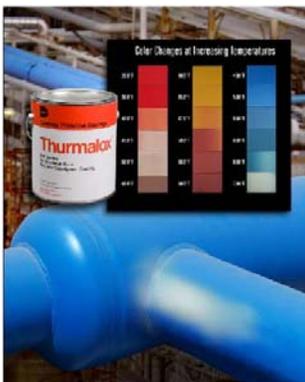
Finishes:

THURMALOX 200* — A silicone top coat applied to properly primed un-insulated carbon and stainless steel surfaces with a maximum heat resistance of 500°F (260°C). ThurmaloX 200 series coatings are available in both standard and custom color formulations.

THURMALOX 230* — A silicone top coat applied to properly primed un-insulated carbon and stainless steel surfaces with a maximum heat resistance of 1200°F (649°C). ThurmaloX 230 series coatings are available in both standard and custom color formulations.

THURMALOX 260* — A self-priming DTM silicone applied to properly prepared un-insulated carbon and stainless steel surfaces with a maximum heat resistance of 500°F (260°C) continuous with peaks to 600°F (315°C). ThurmaloX 260 series is designed for both ambient and hot applied/on-line installations up to 500°F (260°C) and is available in both standard and custom color formulations.

THURMALOX 260 TIC (Temperature Indicating Coating) — A self priming silicone which provides a temperature indicating coating to alert operations of refractory hot spots and system overheating/bypassing of hot gasses. ThurmaloX 260 TIC is available in three colors with an indicating range of 400°F (204°C) up to 700°F (371°C).



THURMALOX 280* — A silicone aluminum top coat applied to properly primed un-insulated carbon steel surfaces with a maximum heat resistance of 1200°F (649°C).

CUI (Coating Under Insulation):

THURMALOX 70* — A self priming silicone applied in two coats to properly prepared insulated stainless steel surfaces with a maximum heat resistance of 1000°F (538°C) continuous with peaks to 1100°F (593°C). ThurmaloX 70 series coatings are formulated to be free from chlorides and heavy metals, both leading contributors to stress corrosion cracking of insulated stainless steel.

THURMALOX 218/219 — A two component modified silicone designed for the protection of insulated carbon and stainless steel surfaces with a maximum heat resistance of 450°F (232°C) continuous with peaks to 500°F (260°C). ThurmaloX 218/219 is formulated for both ambient and hot applied installations up to 300°F (177°C) and can be re-insulated in 24 hours at 77°F (25°C).

*Available in low VOC formulations.



THURMALOX 837/225HD — A self curing hybrid inorganic zinc rich primer with a maximum heat resistance of 1200°F (649°C). Endcor 837 topcoated with Thurmalox 225HD is ideal for use on new construction insulated carbon steel surfaces.

THURMALOX 2655 — A one-part, room temperature vulcanizing (RTV) silicone adhesive/sealant for high temperature industrial applications with a maximum heat resistance of 550°F (288°C) with peaks to 650°F (343°C).



Specialty OEM Products

THURMALOX 250 SOLAR COLLECTOR COATING — Selectively absorbs wavelengths with the greatest heat content when used on the metal surfaces of collector panels having glazed covers.

THURMALOX 2804 ALUMINUM — A water based silicone which provides heat resistance to 1000°F (538°C).

THURMALOX 2900 — A water based marking paint applied through automated marking machine to hot steel ingots, slabs and coils up to 1800°F (982°C).

THURMALOX 8200 — A self priming DTM silicone which provides heat resistance up to 800°F (426°C).



APEXIOR® Immersion Linings

APEXIOR NUMBER 1* — A single component lining formulated for the hot waterside corrosion prevention of metal surfaces. Apexior Number 1 is designed for non-potable immersion ranging from 200°F (93°C) up to 700°F (371°C).



APEXIOR NUMBER 3* — A single component lining formulated for the waterside corrosion prevention of metal surfaces. Apexior Number 3 is designed for non-potable service ranging from ambient to 140°F (60°C).

*Apexior products are available in low VOC formulations.

THURMALOX 8800 — A baking enamel available in low sheen and gloss formulation with heat resistance up to 500°F (260°C). Thurmalox 8800 provides a smooth porcelain like finish.

THURMALOX 8886 — A two component silicone copolymer lining resistant to glycol cooling agents and synthetic lubricants up to 450°F (232°C).



THURMALOX 8898 — A DTM silicone alkyd which provides heat resistance up to 300°F (149°C). Thurmalox 8898 provides an easily cleaned glossy surface.

ENDCOR / EPODUR® Series Maintenance Coatings

ENDCOR 400C — A low VOC chromate free wash primer.

RUST RINSE™ 450 — A phosphoric acid based metal conditioning compound for ferrous and non-ferrous metals.

ENDCOR 560C — A single component universal primer providing an excellent tie coat to existing coatings. Endcor 560C accepts a wide range of topcoats.

ENDCOR 570C — A single component silicone alkyd (contains 30% silicone) providing a glossy UV stable finish coat.

ENDCOR 700C — A low VOC semi-gloss epoxy enamel applied to properly prepared concrete and steel surfaces.

ENDCOR 750C — A low VOC polyamide epoxy primer for carbon steel and concrete surfaces.

ENDCOR 772 — A polyamide cured coal tar epoxy which complies with SSPC paint #16. Endcor 772 is ideal for buried pipeline, tank interiors and splash zone applications.

ENDCOR 782 — 100% solids coal tar epoxy designed for immersion in fresh and salt water application. The solvent free formulation eliminates concern for solvent entrapment and VOC emissions.

EPODUR 795/794 — A chemical and abrasion resistant epoxy with dry heat resistance up to 350°F (176°C).

ENDCOR 835 — A self curing ethyl silicate inorganic zinc-rich primer.

ELASTOID®

ELASTOID 1300 — A single component elastomer with 200% elongation, Elastoid 1300 protects concrete and carbon steel surfaces in wet or submerged applications. May also be used as a gel coat for foam insulated tanks.



DYMACRYL®

DYMACRYL 1100 SIERRA TONE — A pigmented acrylic masonry stain providing a UV resistant treatment which resists water permeation, acid rain and salts. Dymacryl 1100 Sierra Tone is available in 10 standard colors and custom colors.

DYMACRYL 1133 — A colorless non-yellowing concrete treatment resistant to salts, alkalis and acid rain.

DYMACRYL 1197 — A water clear masonry conditioning compound.



ALVIN Products

LAB-METAL® — A ready mixed aluminum filled repair and patching compound with heat resistance up to 350°F (176°C).

HI-TEMP LAB METAL® — A single component metal putty with heat resistance up to 1000°F (538°C). Hi-Temp Lab-metal is ideal for repairs in powder coating and metalworking applications.

HEAT BLOCK — A non-toxic heat absorbing paste designed to prevent heat transfer during the brazing, soldering and welding process.

GALVAX® — A zinc-rich cold galvanizing compound containing 95% zinc in the dried film.

TELCON® — A mold release and dry film lubricant used for molded rubber, epoxy resin systems, threaded parts and precision instruments.



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