

REDI-SPEC

I PRODUCTS

TEMP-COAT 101[®]

II Properties of TEMP-COAT[®]

Percent Solids by Volume: (+/-) 83%

Wet Weight: 5.25 lb/gal

Shipping Weight per 5gal pail: 28.5 lbs

Dry Weight: 0.8 oz/ft² @ 20 mils
4.0 oz/ft² @ 100 mils

Theoretical Coverage @ 20 mils:
66.6 ft²/gallon

Expected Coverage: Please see application guide or contact technical rep.

VOC Content: 0.0099 expressed per EPA Method 24 (weight fraction)

Thermal Value: $k_{(eqv)} = 0.23$ (Btu-in)/
(hr-ft²·°F)

Test results indicate that a 15 mil thickness can create an "R" factor equivalent to R-19/20

The operating temperature range for TEMP-COAT[®] can be from -80°F (-62C) to 400°F (+205C)*. It can be applied to temperatures ranging from 45°F to 350°F**. On extremely warm to hot surfaces, beginning coats must be thin to avoid blistering.

** In some instances for temperatures 400°F to 500°F a mesh/membrane must be used and the High Heat Application Instructions must be followed.

III DESCRIPTION

TEMP-COAT[®] is a general purpose insulation which comes in liquid form.

TEMP-COAT[®] liquid ceramic insulation is a thin film that performs extremely well

on piping, tanks, air and heat duct work, exposed water pipes, oxygen lines, steam lines, chilled water lines, cryogenics, vehicle/transportation and has many other uses.

TEMP-COAT[®] provides an inexpensive alternative to the high cost of industrial insulations. Because it physically adheres to the surface that it is insulating, it significantly reduces (CUI) corrosion and rust formations found under conventional insulations.

Make Up: TEMP-COAT[®] is a complete mixture of various hollow silica and ceramic beads immersed in a high quality latex base with acrylic binders. This combination of materials makes the product extremely light weight and pliable, therefore, it expands and contracts with the surface to which it is applied.

TEMP-COAT[®] can be tinted virtually any medium to pastel color.

IV Benefits of TEMP-COAT[®]

- Curbs Corrosion Under Insulation (CUI) by adhering to the surface it insulates
- Ability to insulate at relatively thin film compared to conventional insulations
- Does not Require Jacketing
- Easily Repaired
- Ease of inspection
- Can be applied on surfaces up to 350°F without disruption of operations
- Will not absorb moisture or liquids
- Will not harbor bacteria, rodents or insects
- Eliminates waste
- Ease of Application

V. APPLICATION

Surface Preparation

Apply TEMP-COAT[®] on any clean, dry

substrate which is free from oil, grease, wax or dirt and assuming the existing coating or surface is stable. A minimum of SP-2/SP-3 or equivalent. A sufficient amount of Primer on all surfaces prone to rust and to prevent bleed through is recommended.

Mixing

A rectangular Sheet Rock Mud paddle is needed to blend the product.*

Equipment

Spray equipment requirement: Pump capable of producing 2 to 3 gpm at 3000psi (28:1 ratio airless sprayer or larger) *

Our air assisted "Quik-Gun" is designed for small or hard to reach applications. This gun operates on 80 psi air supply.*

Brush and roller is only recommended for touch ups and repairs.*

Application Conditions:

Surface temperature should be 45°F and rising.*

Product should be applied in 20 mil coats, allowing the product to dry to the touch prior to successive coats. Total cure time is 24 hours under normal conditions.*

Clean-Up

TEMP-COAT[®] is a water based acrylic product. Clean up immediately after use with soap and water. *Caution:* Use drop cloths and necessary protection to prevent damage from drips or overspray under windy conditions.*

*Please see our Application/Instruction Manual.

Distributed by:



TEMP-COAT[®]
Is listed with
the following:



Approved for
use by:



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VI APPROVALS & ACCEPTANCE

UL Listed: PD# 08M33835
 CRRC Prod. ID 0998-0001
 MAS Certified Green Product
 Energy Star Partner
 Lloyd's Register of Shipping #SAS FOI0506
 GSA/NSN #8030 01 387 1027
 Approved: U.S. Coast Guard, MLCA Std 6300N P .35
 Accepted for Certification by: USDA Accepted by: FDA
 Approved by: Dept. of Energy
 Accepted by: Navy Safety & Survivability
 Accepted by: British Royal Navy Health and Safety
 S.I.C. Code: 5033
 All Ingredients TSCA Listed

VII TEST RESULTS

TEMP-COAT® has been tested under a number of varying conditions to produce "R" factor equivalence which is available in the information below. The product has also undergone a number of ASTM tests including:

THERMAL PROPERTIES

Independent Thermal Evaluation: Thermal conductivity value determined by comparative testing.

$$k_{(eqv)} = 0.23 \text{ (Btu}\cdot\text{in)/(hr}\cdot\text{ft}^2\cdot\text{°F)}$$

Thermal properties directly relate to the thickness of product required to insulate a given substrate.

CERTIFIED LAB & ASTM RESULTS

| | | |
|------------------------------------|-------|---------|
| SOLAR REFLECTANCE RATING TESTED TO | 87.7% | Average |
| EMITTANCE RATING | 85% | |

FLAMMABILITY

| | | |
|-----------------|---|-----------|
| FLAME SPREAD | 5 | ASTM E-84 |
| SMOKE DEVELOPED | 5 | ASTM E-84 |
| TOXICITY | 0 | ASTM E-84 |

MECHANICAL PROPERTIES

| | | |
|--|-------|-------------|
| CROSS HATCH ADHESION | 100% | ASTM D-3359 |
| TENSILE STRENGTH (LB/IN ²) | 66.7% | ASTM D-882 |
| ELONGATION | 65% | ASTM D-882 |

PHYSICAL PROPERTIES

| | | |
|---|-------|-------------------|
| FUNGAL GROWTH | NONE | MIL-STD-810 |
| VAPOR TRANSMISSION | 0.635 | ASTM E96, Meth. E |
| ACCELERATED AGING 200 HR. PASSED | | ASTM G-53 |
| DENSITY (g/ch ³) @ 24C DRIED FILM | 0.41 | ASTM D- 792 |
| VOLUME NON-VOLATILES | 43% | |

| | |
|---------------------|---------------|
| VOLUME DRIED FILM | 83% (+/-2) |
| Ph | 8.7 |
| SPECIFIC GRAVITY | 0.69 |
| HEAVY METALS | NONE DETECTED |
| CHLORIDES - MERCURY | NONE DETECTED |

- SEVERE SERVICE AND WEATHER TESTING BY ARCO ALASKA, PROD. - APPROVED.
- PIPE COATING, SEVERE SERVICE FOR P&G - PASSED
- SALT FOG, McDONNELL DOUGLAS - 2,100 HRS PASSED
- PERSONNEL SAFETY TEST INGALLS SHIPBUILDING - PASSED
- DB INSERTION REDUCTION CHARACTERISTICS NOTED IN BOEING TESTS

ROOF COATING: THERMAL AND REFLECTIVE COMPARATIVE TESTING BY CERTIFIED LABS SHOW TEMP-COAT® EQUIVALENT TO 4" OF STYROFOAM RATED AT R-20

VIII OTHER EXCEPTIONAL FEATURES:

The product, in addition to its outstanding insulating qualities and superior adhesion, has low flame spread, is impact and abrasion resistant, is flexible and assists in protecting coated surfaces from wind driven rain, cold-heat cycling, chemical vapors and mildew. These qualities make it the standard in ceramic coatings.

IX SHIPPING AND SUPPLY METHOD

TEMP-COAT® Brand Products are available FOB shipping point or from a distributor near you. Call +7 (495) 665-0296 for availability in your area and price information.

X WARRANTY

Limited Warranty: TEMP-COAT® Brand Products, LLC. warrants TEMP-COAT® as an insulation under normal use and installation conditions for a period of 10 years from the date of application. Insul-All™ 8 years. Complete warranty and installation information is available upon request.

XI MSDS INFORMATION

All ingredients are TSCA registered and are not harmful. For Material Safety Data Information, contact THERMO TECHNOLOGY, FZE +7 (495) 665-0296
 E-mail INFO@TEPLO-ENERGO.COM

XII PRICE

THERMO TECHNOLOGY, FZE,
 +7 (495) 665-0296 • INFO@TEPLO-ENERGO.COM

XIII SURFACES

TEMP-COAT® can be applied to any of the following clean, dry surfaces.

Steel Chrome Galvanize Aluminum Iron Fiberglass Brass Cloth Copper Stone Slate Stainless Tar Vinyl Glass Polyurethane Foam Plexi-glass Cardboard Paper Magnesium Plastic Glass Pipe Plastics Masonite Primed Surfaces Asbestos Fiberboard Painted Surfaces Wood Granulated Roof Shingles ...and many more