



TEMP-COAT[®]

THE POWER TO INSULATE AND PROTECT

TEMP-COAT Brand Products
17351 Hard Hat Row Unit B18
Covington, La 70435
985-875-2471
www.tempcoat.com
info@tempcoat.com



Highlights

- **25 Years of Successful Installation (with NO warranty issues)**
- **Global Distribution**
- **3 ISO certified manufacturing locations in the US**
- **Operating temperature range from -80°F to 350°F (-62°C to +177°C)**
- **Low VOC, MAS Green Approved, Approved by EPA**
- **Application with no need for shut-down or process interruption**
- **Quick drying - 1/5 liquid by volume**
- **Light weight – 5.9lbs per gallon (0,71kg per Liter) (In Pail)**
- **Acrylic Latex Binders for long life and UV Resistance**
- **Inhibits mold and mildew growth**
- **High Quality with 10 year Manufacturer Warranty**
- **Full range of quality testing**
- **Color to tint product may be added in country by distributor**
- **Remarkable Return on Investment**
- **Installed by local distributors or local contractor following certification**

Overview

- **A Ceramic Insulation that is a Thin Thermal and Condensation Barrier used as :**
 - Heat and Cold Temp Control
 - Personnel Protection
 - Anti-Sweat Control
 - Acoustics Control
- **And Can be applied to:**
 - Steam Pipes, Process Systems, Storage Tanks, Heat Exchangers
 - Roof Top, ISO containers
 - HVAC ducts, and much more

**Offshore Loading Skid
Photo Courtesy of
Chevron**

- **Thermal Effects**

- keqv value of 0.23 (BTU·in)/(hr·ft²·°F) (0.033 W/m·°K) according to independent tests
- k value range of 0.49 to 0.63 (BTU·in)/(hr·ft²·°F) (0.071 to 0.091 W/m·°K) per ASTM C-177

- **Fire Safety**

- LOW FLAME SPREAD of 5 (ASTM E-84) (0 is concrete and 100 is red oak flooring)
- Lloyd's Register Type Approved



Test Data

TEST	Results
Adhesion (ASTM D3359)	5A & 5B
Tensile (ASTM D638)	
• Strength, psi (bar)	66.7 (4,6)
• Elongation, %	65
Mandrel Bend (ASTM D522)	3/8" Pass
Salt Fog (ASTM B117, 2000hrs, 5%NSS)	
• Scribe	10
• Field	10
Accelerated Aging, \E (ASTM G53, UV-A)	
• 2,000 Hours	1.08 (Excellent)
Total Solids, wt% (ASTM D2369)	82.72%
VOC EPA Method 24 (ASTM D2369)	0.071 lbs/gal (0.0085 kg/liter)
ASTM E84 (Flame Spread)	Class A
ASTM E162	Class A
IMO FTP Code Part 5&6 (Flame Spread)	Pass(Interior Use on Passenger Vessels)
IMO FTP Code Part 2 (Smoke and Toxicity)	Pass (Interior Use on Passenger Vessels)

TEMP-COAT Brand Products has on file a wide range of testing available for review

Advantages

Personnel Protection

- Piping, flanges, valves, eyewash piping, tanks etc...



Personnel Protection

- The base guidelines widely used by industry is generally is for the surface temperature to be less than 140°F (60°C)
- ASTM C1055 (Standard Guide for Heated System Surface Conditions that Produce Contact Burn Injuries) defines the maximum acceptable temperature for a particular surface derived from estimate of the possible or probable contact time.
- Per ASTM 1055, probable contact time established for industry is 5 seconds.
- Per ASTM 1057, a thermesthesiometer may be used to replicate the thermal physical response for the human finger.

Advantages

Thermesthesiometer Reading After 5 sec. (Simulated Skin Temperature @ 85°F (29,4°C) Ambient

Coating Thickness	200°F	250°F	300°F	350°F
	93°C	121°C	149°C	177°C
40 mils	114°F	123°F	135°F	
1 mm	45,5°C	50,6°C	57°C	
60 mils	112°F	121°F	131°F	
1,5 mm	44,4°C	49,4°C	55°C	
80 mils	112°F	119°F	129°F	130°F
2 mm	44,4°C	48,3°C	53,9°C	54,4°C
100 mils	110°F	117°F	127°F	130°F
2,5 mm	43,3°C	47,2°C	52,8°C	54,4°C
120 mils	108°F	115°F	122°F	129°F
3 mm	42,2°C	46,1°C	50°C	53,9°C
140 mils	103°F	112°F	120°F	127°F
3,5 mm	39,4°C	44,4°C	48,9°C	52,8°C
160 mils		112°F	119°F	127°F
4 mm		44,4°C	48,3°C	52,8°C

Thermesthesiometer Probe:
Model:

Therm-X
XTMS3125

Serial Number:

27758-040413-2

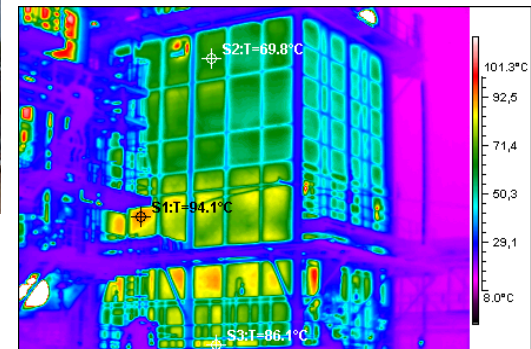
Calibrated by Manufacturer:

YES

Advantages

Energy Retention

- Energy Savings
- Improve Process Heating and Cooling
- Reduce Thermal Shock from Environment
- Reduce Thermal Expansion



Advantages

Ease of Inspection

- Fast Visual Assessment
- Ease of Repair



Advantages

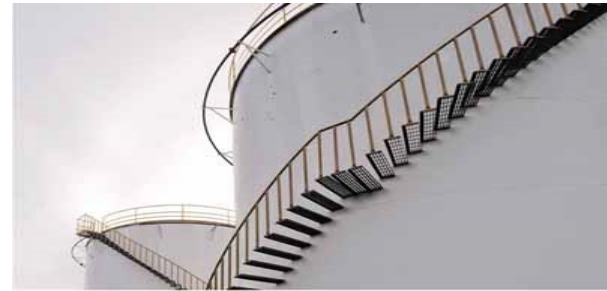
Control of CUI

- Seamless Installation
- Adheres to Substrate



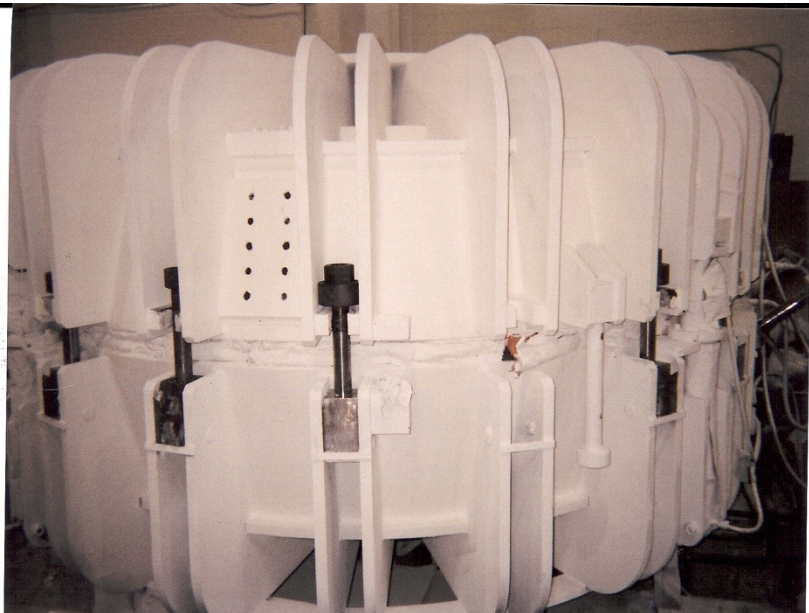
Advantages Petroleum and Chemical

- Reduces loss due to heating and cooling (sludge build up)
- Eliminates over 85% of solar heat transfer - highly reflective
- Adheres to hot and cold surfaces (-80°F (-66.2°C) to +350°F (177°C)) and can insulate surfaces to 500°F (260°C) but with a fiber class mesh reinforcement
- Can be applied to surfaces up to +350°F (177°C) without disrupting operations
- Does not require jacketing allowing for visual inspection
- No seams to leak and cause corrosion issues
- Not prone to wind, hail or snow load damage
- Adheres directly to surface (eliminating moisture between insulation and surface causing scale and corrosion (CUI))
- Little to no maintenance and easy to use and repair
- Reduces or stops expansion and contraction, which causes roof damage



- Creates a better work environment, increasing productivity
- Provides a constant, uninterrupted thermal barrier regardless of the length or size of the job
- Extremely cost effective
- Can be tinted most light to medium colors by manufacturer or in country
- Environmentally Friendly: Low VOC's and No Heavy Metals

More Advantages



- 15 mil (0,4 mm) to 20 mil (0,5 mm) per coat
- Performed by local certified applicators
- Surface application temperatures 45°F (7°C) and rising to 350°F (177°C)
- Uninhibited airless spray application between 15 mils (0,4 mm) and 30 mils (0,8 mm) on flat surfaces, with weather and conditions acceptable, a team of two persons can apply 550 SF (51m²) per hour using conventional airless spray equipment
- Flash time under normal dry conditions is two (2) hours or less - much faster on warm to hot surfaces

Consumption Metrics

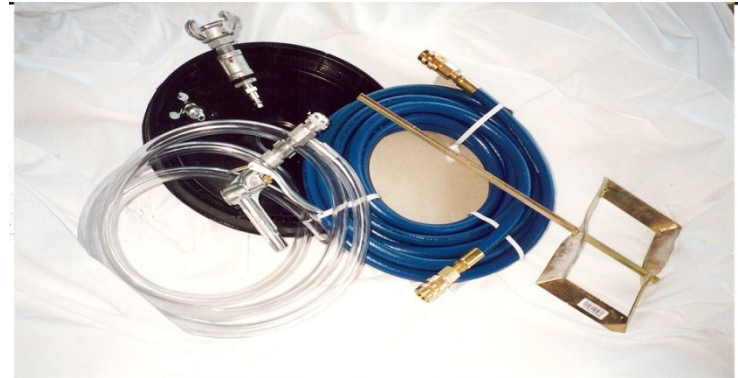
Temperature °F	Temperature °C	Desired mm thickness	Desired mil thickness	Sq Feet per Gallon	m ² per Gallon	m ² per Liter	Liter per m ²
		6,10	240	3,75	0,35	0,09	10,87
400**	204	5,33	210	4,29	0,40	0,11	9,50
		5,08	200	4,25	0,39	0,10	9,59
		4,57	180	5,00	0,46	0,12	8,15
350*	176	4,06	160	5,50	0,51	0,13	7,41
		3,56	140	6,50	0,60	0,16	6,27
300	149	3,30	130	7,00	0,65	0,17	5,82
		3,05	120	7,50	0,70	0,18	5,43
250	121	2,79	110	8,18	0,76	0,20	4,98
		2,54	100	8,50	0,79	0,21	4,79
200	93	2,03	80	12,00	1,11	0,29	3,40
		0,76	30	30,00	2,79	0,74	1,36
32	0	0,51	20	40,00	3,72	0,98	1,02
		0,38	15	60,00	5,57	1,47	0,68
0	-18	1,02	40	20,00	1,86	0,49	2,04
-30	-34	1,27	50	16,00	1,49	0,39	2,55
-45	-43	1,52	60	15,00	1,39	0,37	2,72



Above Chart Reflects Practical Coverage With Loss

- * May disbond on at temps over 350°F (177°C)
- ** Temperatures greater than 350°F (177°C) require reinforcement with a fiber class mesh

Application Facts

- Product is 83% Solids By Volume
- Surface Preparation: SP2 Hand Tool Cleaning as defined by Steel Structures Paint Council
- Appropriate primer recommended for ferrous metals
- Product is mixed utilized a square sheet rock mud paddle
- Generally installed with airless spray equipment rated at 2 to 3 gallons (7,5 to 11 liters) per minute at 3000 psi (200 bar)
- Small applications and repairs may be achieved by use of the Quick Gun or brush and roller as needed
- TEMP-COAT BRAND PRODUCTS is a full service oriented company. We provide technical assistance from the beginning to end of your project to ensure its success.



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TEMP-COAT Project Data Sheet				
Contact Information				
Name:		Company:		
Address:				
City:		State:		Zip:
Phone:		e-mail:		Fax:
Project Information				
System or Object:				
Dimensions:				
Substrate material:				
Current Condition of substrate:				
Current insulation:				
Primed or Un-primed:				
Design Temperature of System:				
Operating Temperature of System:				
Skin Temperature of Substrate (if known):				
Desired Temperature of Material in System:				
Will system require heating to maintain required temperture, if so please indicate system requirements?				
If substrate to be insulated is cold, is condensation an issue:				
Ambient conditions in the region vessel will be operated:				
Summer Temperature:		Winter Temperature:		
Summer % Humidity:		Winter % Humidity:		
Avg Wind Speed:		Avg Wind Speed:		
Please indicate if any other special considerations may apply:				
For use by TEMP-COAT Brand Products Representative				
Total Square meters:				
mm thickness Recommendation:				
Total Gallons of Product Needed:				

Case History

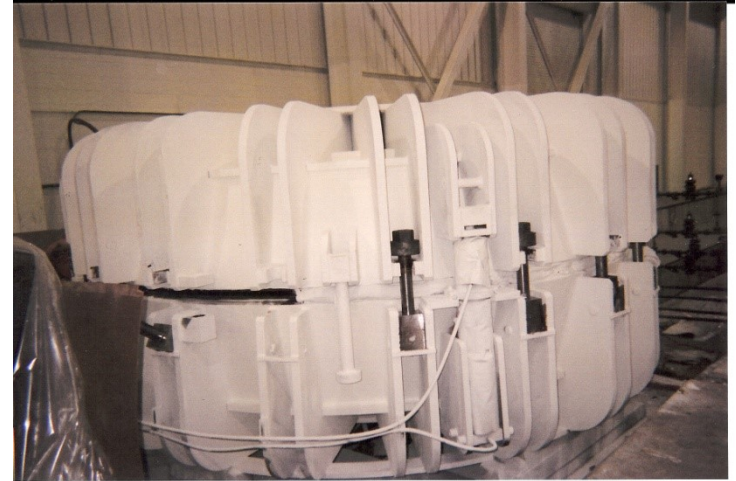
Client: Evergreen
Location: Arkansas
Black Liquor Storage Tanks
Surface Temperature: +350°F (177°C)
Operation: Constant
Year Coated: Approx. 2004
Status: Satisfactory
Contact: Mickey Dubose
(870)541-3749

Client: Chevron
Location: Pascagoula, MS
Oil Product Storage Vessel
Surface Temperature: +350°F-400°F
(177°C-204°C)
Operation: Constant
Year Coated: 2012
Status: Satisfactory
Contact: Jason Harris
228-934-7908



Case History

Client: Titan Tire
Location: Ohio
Surface Temperature: +350°F (+177°C)
Operation: Cyclic
Year Coated: 2007
Status: Satisfactory
Contact: N/A



Client: Conagra
Location: California
Surface Temperature: +350°F (+177°C)
Operation: Cyclic
Year Coated: 2009
Status: Satisfactory
Contact: N/A



Case History

Client: GAZPROM
Location: Russia (Omsk & Moscow)
Heat Exchangers (Over 57)
Surface Temperature: +300°F
(149°C)
Operation: Constant
Year Coated: Work started 2011
Status: Satisfactory
Contact: By Appointment



Client: GAZPROM
Location: Russia (Omsk & Moscow)
Furnaces (Over 42 Furnaces)
Surface Temperature: +300°F
(149°C)
Operation: Constant
Year Coated: Work Started 2011
Status: Satisfactory
Contact: By Appointment



Case History

Client: Shell
Location: Norco
Pipe Systems
Surface Temperature: +/-200°F (93°C)
Operation: Constant
Year Coated: 2003
Contact: By Appointment

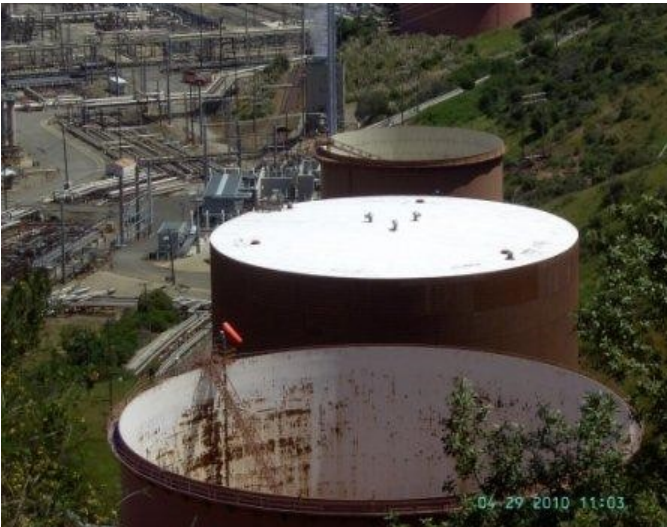


Client: Chevron Offshore
Location: Angola
Loading Skids
Surface Temperature: +/-200°F (93°C)
Operation: Constant
Year Coated: Work Started 2011
Status: Satisfactory
Contact: N/A





Chevron Offshore (Angola)



Chevron (California)











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