

ChemLINE® TDC

ChemLine® Industrial Coatings

PRODUCT NAME	TEMP RATING	CURE SCHEDULE	APPLICATION METHOD	SYSTEM DFT	TYPICAL APPLICATIONS	FEATURES & BENEFITS
ChemLine® 784/32	-40°F to +400°F (-40°C to 204°C)	180°F to 300°F (6 hours) (82°C - 149°C)	SP,BR,RL	12-14 mils (steel)	Reactors, chemical storage tanks, scrubbers, piping, ducts, rail cars, ISO tanks, OTR tankers, & barges	Excellent chemical resistance. Low temperature cure.
	-40°F to +400°F (-40°C to 204°C)	Ambient (5-15 days)	SP,BR,RL	12-14 mils (steel) 20-24 mils (concrete)	Secondary containment, clean rooms, structural steel, manhole covers/ vaults, floors	Ambient cure. Excellent chemical resistance.
ChemLine® 784/31	-40°F to +500 F (-40 C to 260 C)	250 F to 350 F (6 hours) (121°C - 177°C)	SP,BR,RL	12-14 mils (steel)	Tanks, pipes, & scrubbers	High temperature resistance. Best chemical resistance at high temperature.
ChemLine® 2400 Series	-40°F to +400°F (-40°C to 204°C)	180°F to 300°F (6 hours) (82°C - 149°C)	SP,BR,RL	16-18 mils (steel)	Slurry tanks, scrubbers, dump trucks, bag houses, FGD units, tank containers, & hopper cars	Outstanding abrasion resistance. Excellent chemical resistance. Low temperature cure.
	-40°F to +300°F (-40°C to 148°C)	Ambient (5-14 days)	SP,BR,RL	24-26 mils (concrete)	Slurry tanks, pipes, secondary containment, sumps, trenches, pits, & clarifiers	Ambient cure. Outstanding abrasion resistance. Excellent chemical resistance.
ChemLine® LE	-40°F to +500°F (-40°C to 260°C)	250°F to 350°F 6 hours (121°C - 177°C)	SP,BR,RL	12-14 mils (steel)	Stacks, ducts, heat exchangers, pressure vessels, FGD systems, bag houses, & scrubbers	High temperature resistance. Best chemical resistance at high temperature. Excellent CTE match with steel.
ChemLine® TDC	-40°F to +500°F (-40°C to 260°C)	200°F to 400°F (3-6 hours) (93°C - 204°C)	SP	30-60 mils (steel)	HOT steel structures, steam pipes	Temperature dissipating coating for hot steel surfaces where heat can cause injury.
ChemLine® Primer	-40°F to 110°F (-40°C to 43°C)	Ambient	SP,BR,RL	3-4 mils (concrete)	Secondary containment tanks	Superior bonding & sealing properties.
ChemLine® Caulk	-40°F to +212°F (-40°C to 100°C)	Ambient	Trowel	See data sheet	Covings, cracks, & joints	Excellent chemical resistance & flexibility. (Pre-measured quart kits).
ChemLine® Putty	-40°F to +250°F (-40°C to 121°C)	Ambient to 300°F (149°C)	Trowel	See data sheet	Pitted steel & chime areas	Excellent chemical resistance & flexibility. (Pre-measured quart kits).

KEY CODE:

SP= Spray Application
BR= Brush Application
RL= Roller Application

-----THIS IS ONLY A REFERENCE GUIDE-----

Contact your ChemLine® Representative or the ChemLine Customer Service Hotline 1-800-334-7193 for detailed specifications prior to any final coatings recommendation or application.

NOTE- The Roller and Brush application is NOT a preferred application to use on steel; only use for repair or stripe coating.

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Product covered under one or more of the following patents or patents pending. 5,169,912 5,658,996 5,874,501



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CHEMLINE® TDC

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Temperature Dissipating Coating

A surface tolerant, temperature dissipating coating used to lower substrate temperatures and provide a very corrosion resistant finish.

Description

- ChemLine® TDC is a specially formulated ChemLine® coating that provides an insulating barrier to reduce high temperature surfaces for personnel protection.
- ChemLine® TDC acts as an insulative coating along with the outstanding chemical resistance of ChemLINE® 784.

Application Highlights

- Minimum Surface Preparation
- Can be Applied Directly to Hot Clean Surface to 300°F (150°C)
- Can be Built up to 60 mils in One Coat on a Hot Surface
- Can be Touched Up After Minor Structural Repairs
- Can be Applied to Virtually any Substrate Material and Eliminates Corrosion
- No Primer Required
- Tough, Non Absorbing Barrier

Industry Highlights

- Pipes
- Heat Exchangers
- Pressure Vessels
- Tanks
- Any Surface where Heat can cause Personnel Harm

Chemical Resistance:

- Acids: To 98% Sulfuric, Hydrochloric, Acetic, Phosphoric
- Caustics: Sodium Hydroxide, Potassium Hydroxide
- Oxidizers: Sodium Hypochlorite, Peroxide
- Solvents: Methylene Chloride, Methanol, Ketones, DMF
- Oils
- Sea Water
- Skydrol
- Thousands of Other Chemicals

Temperature	Thickness	ΔT
250°F to 280°F (121°C to 137°C)	80 mils	80°F (26°C)
200°F to 250°F (93°C to 121°C)	60 mils	60°F (15°C)
150°F to 200°F (65°C to 93°C)	30 mils	50°F (10°C)

(Above information is based on laboratory test. Individual test may vary based on substrate and thickness.)

Typical Properties

Weight per Gallon (lbs./gal.)	7.9 lbs.
V.O.C. (grams/liter)	55 gms.
Flash Point	127°F (53°C)
Lead Content	Zero
Solids by Volume	97% (+1%)
Recommended Dry Film Thickness	60+ mils
Practical Coverage at 60 mils (sq.ft. per gallon)	25 sq.ft.
Pipe Coverage @ 60 mils (0.060"):	
4" O.D.	58 Linear Feet
8" O.D.	29 Linear Feet
12" O.D.	19 Linear Feet
Impact Resistance	+ 180 in. lbs.

Advantages of ChemLINE® TDC Temperature Dissipating Coating Over Acrylic Based Insulative Coatings

	ChemLine® TDC Coating	Acrylic Based Insulative Coating
Material Cost per sq.ft. @ 20 mils DFT	\$ 2.00	\$ 1.60
Percent Solids	97%	43%
Primer Required	No	Yes
Primer Cost per sq.ft.	\$ 0.00	\$ 0.23
Total Material Cost per sq.ft.@ 20 mils DFT	\$ 2.00	\$ 1.83
Surface Preparation	Si3/SP3 {Power Tool}	SP10 {Near White blast; 2-3 mil profile}
Cost of Surface Prep per sq.ft.	\$ 0.10	\$ 0.75
Total Material and Application Cost per square foot	\$ 2.10	\$ 2.58
Maximum One Coat Build Up	60 mils	20 mils
Resistant to Concentrated Acids	Yes	No
Resistant to Solvents	Yes	No
Resistant to Oxidizers	Yes	No
Moisture Absorption	No	Yes

	External Sq.Ft. per Linear Foot of Pipe	Cost per Linear Foot of Pipe (20 mils DFT)	
		ChemLine® TDC	Acrylic Insulative Coating
3" Pipe	0.916	\$ 1.92	\$ 2.36
4" Pipe	1.178	\$ 2.45	\$ 3.03
6" Pipe	1.734	\$ 3.63	\$ 4.47
10" Pipe	2.814	\$ 5.90	\$ 7.26
12" Pipe	3.350	\$ 7.03	\$ 8.64

Application Instructions

ChemLine® TDC must be mixed and applied properly to achieve all its insulative properties.

Equipment Recommendations

- Mixing equipment, 1/2 " reversible drill with jiffy type mixing blade.
- Airless Spray System; Minimum 1.0 gallons per minute at 3000 psi (Graco Bulldog or equivalent).
- 3/8" spray hose minimum, no 1/4" line or whip.
- Reversible nozzle with tip size .028" to .031". Fan width depends on size of surface to be sprayed. For pipe, a 431 or 528 tip is recommended.
- Graco contractors gun or equivalent, no filters, with swivel nozzle.

Application Conditions

- Safety Equipment; Enclosed Areas: Saranex coveralls, full face air-supplied mask, rubber gloves (read MSDS prior to using this product).
- Safety Equipment; Open Areas: Tyvek coveralls, OSHA approved respirator, rubber gloves (read MSDS prior to using this product).
- Use only with adequate ventilation. When applying in closed area, open doors, windows, or use other means to ensure fresh air circulation. Forced air circulation with fans during application and drying is required.

For Industrial Use Only

Surface Preparation

- Remove all dirt, oil, grease, etc.
- Remove all rust and loose material by wet or dry abrasive blasting or power tool cleaning to SSPC-SP3.
- Remove salts and other contaminants with deionized water or pressure hosing with potable water.
- Surfaces previously painted – when the existing coating is considered unsound or incompatible with ChemLine® TDC coating, it shall be completely removed. If removal of existing coating is not required, it shall be cleaned by acceptable method and if necessary, roughened by sanding or abrasive sweeping.

Mixing Instructions

- ChemLine® TDC is supplied in kits (resin and catalyst) which contain the proper ratio of ingredients.
- Material is supplied in two containers as a unit – Always mix a complete unit in the proportions supplied.
- Mechanically agitate component A (resin) until uniform consistency is achieved.
- Add component B (catalyst) and mix thoroughly for 3 to 5 minutes with mechanical mixer. The mixture must be homogeneous smooth before use. Pot life is approximately 6 hours at 74°F (25°C). Pot life will be shorter as temperature increases.
- **Application; Hot Surfaces:**
Multiple coats can be applied within minutes to hot surfaces above 176°F (80°C).
- **Application; Cold Surfaces:**
Maximum wet film thickness 60 mils. Allow 8 to 12 hours (depending on temperature) for solvent release prior to application of additional coats. After final coat, heat substrate to fully cure ChemLine® TDC.
- ChemLine® TDC can be applied by brush, roller or spraying.

Clean Up Solvent

Acetone, Toluene

Handling Precautions

Solvents and chemicals are contained in this product. Consult the Material Safety Data Sheet (MSDS) for details. Adequate safety and health precautions should be taken during handling, application and drying of this product. The material should be applied under local, state, and federal regulations and in accordance with OSHA and ANSI bulletins on safety requirements.

Note: The above application data is provided as a general guide only. Only full detailed application specifications are to be used during actual application of ChemLine® TDC.