# Trico Bond SD™

Severe Duty Epoxy Powder Coating





## What's in Your Coatings?

All quality coating systems are based on superior resins and pigments. CST™ invested seven years of research and development and field trials to develop the modified epoxy powder system, Trico Bond SD™, applied to all liquid and dry bulk bolted tanks since 2003. Only lead-free, chrome-free pigments are utilized.

Likewise, CST takes the extra step to apply a performance urethane to all tank exteriors. UV-inhibiting clear urethane greatly extends gloss and color retention properties. It delivers superior UV performance versus powder on powder coatings.

### **Design Standards**

CST's Trico Bond SD epoxy powder coating complies with national and international standards:

- > AWWA D103
- > FDA

#### **Physical Properties**

Application	Test	Trico Bond SD™
Dry Film Thickness (DFT)	Average (DFT)	Interior: 5.0 mil (130 μm) – 10.0 mil (250 μm) Exterior: 3.5 mil (85 μm) – 5 mil (130 μm)
Limiting Temperature	Dry Heat Immersed	275° F (135° C) (Application Dependent) 250° F (121° C) (Product Dependent)
Corrosion Resistance	Salt Spray - ASTM B117 Cyclic Corrosion - ASTM D5894	7000+ Hours 7 Cycles
Impact Resistance	ASTM D2794	Pass - 160 in-lbs direct/reverse impact
pH Range		3-12 (Product Dependent)
Abrasion Resistance	Falling Sand - ASTM D968 Adhesion - ASTM D3359	Pass 212 liters/mil 5B Pass 100%
Surface Gouging Resistance	ASTM D3359	5B Pass 100%
Hardness	ASTM D3363	3H
Chemical Immersion	NaOH; H <sub>2</sub> SO <sub>4</sub>	40% NaOH; 40% H <sub>2</sub> SO <sub>4</sub> – 6 months at 70° F (21° C)
Color	Sahara Gold (Standard)	Other colors available

#### Trico Bond SD™ Chemical Performance

Liquid		Dry	
10% Aluminum Sulfate	Deionized Water	ABS Pellets	Hydrated Lime
32% Ammonium Nitrate	Demineralized Water	Ammonium Nitrate	Kaolin Clay
30% Ammonium Sulfate	Distilled Water	Bauxite	Perlite
20% Ferric Chloride	Potable Water	Bentonite	Polyethylene Pellets
40% Sodium Hydroxide	Fresh Water	Blood (Dried)	Polyvinyl Chloride
15% Urea	Municipal Wastewater	Bone Meal	Sodium Bicarbonate
Bleach	Salt Water	Boric Acid	Soybean Meal
Ammonium Hydroxide	Calcium Chloride	Calcium Carbonate	Starch
#1, 2, 4, 5 & 6 Fuel Oils	Fatty Acids	Calcium Chloride	Terephthalic Acid
Sweet & Sour Crude Oil	Manure	Carbon Black	Urea
Frac/Produced Water	Sewage	Flour	Wood Chips

List of other suitable product applications available. The table above applies to Trico Bond SD coatings. Tank product lines might have other limitations, based upon their configurations.





# World Recognized Leaders 127 Years' Experience

The Trico Bond SD™ coating is another advancement by CST for high temp epoxy coating applications where longer life cycles are required.

# **OptiBond™ Epoxy Coating Process**

Coating performance is highly dependent on proper surface preparation. Good coating systems fail prematurely due to inadequate surface preparation, high dew points and low temperature during application.

CST applies all coatings in an ISO 9001:2015 certified facility, under controlled environmental conditions using its proprietary OptiBond™ coating process to deliver the finest epoxy coating available in the storage tank industry.



Surface Preparation



>> Coating Application



>> Heat Curing

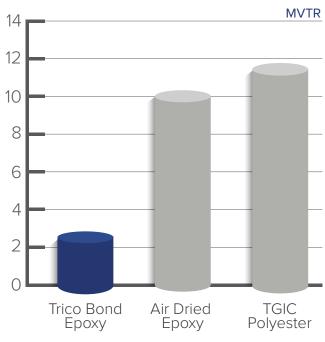


>> Holiday Testing

Quality Assurance				
Final Coating Thickness	_	Electronic DFT Gage		
Coating Voids (Holidays)	_	1,100V Dry High Voltage ASTM D5162 Method B		
Distilled Water	_	Colorimeter Test		

Surface Preparation				
SP10	Near-White Metal Blast	95% White Metal		

# Lower Moisture Vapor Transmission Rate



Trico Bond EP has a lower moisture vapor transmission rate than other coating options.

CST Industries, Inc.  $\mid$  903 E 104th Street, Suite 900  $\mid$  Kansas City, MO 64131 USA  $\mid$  Ph: 844-44-TANKS  $\mid$  cstindustries.com

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