THE SHERWIN-WILLIAMS COMPANY

INDUSTRIAL & MARINE COATINGS

Industrial and Marine Coatings

FAST CLAD™ DTM WB EPOXY

WATER BASED ACRYLIC EPOXY

PART A **B70-800** **SERIES**
PART B **B70V800** **HARDENER**

PRODUCT INFORMATION

Revised 4/03

PRODUCT DESCRIPTION

FAST CLAD DTM WB EPOXY is a single-coat, fast dry, rust-inhibitive, direct-to-metal, water based epoxy finish. It dries to a tough gloss finish that exhibits excellent durability and performance properties that are equal to a two-coat water based epoxy primer/finish system.

- Low odor
- Chemical resistant
- High film build in one coat
- Fast dry to improve productivity
- High film build in one coat
- Meets VOC and HAPS requirements
- Suitable for use in USDA inspected facilities
- Corrosion resistant
- Early moisture resistant

RECOMMENDED USES

For use directly over prepared steel in industrial and marine applications, such as:

- Structural steel
- Industrial machinery and equipment
- Power plants
- Marine applications
- Exterior surfaces of steel tanks
- Rail cars and locomotives
- Water and wastewater facilities

Replaces a two-coat, water based epoxy primer/finish system.

Ideal for new construction or maintenance.

PRODUCT CHARACTERISTICS

Finish: Gloss

Color: Wide range of colors available

Volume Solids: 40% ± 2%, mixed (calculated)
Extra White (May vary by color)

Weight Solids: 48% ± 2%, mixed
Extra White

VOC (EPA Method 24): 144 g/L; 1.20 lb/gal, mixed
Extra White

Mix Ratio: 4:1

Recommended Spreading Rate per coat:

Wet mils:	10.0 - 15.0
Dry mils:	4.0 - 6.0
Coverage:	107 - 160 sq ft/gal, approximate

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 10.0 mils wet @ 50% RH:

	@ 50°F	@ 77°F	@ 120°F
To touch:	1 hour	45 minutes	15 minutes
To handle:	6 hours	4 hours	2 hours
To recoat:			
minimum:	6 hours	4 hours	2 hours
maximum:	30 days	30 days	30 days
To cure:	14 days	14 days	14 days

If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity and film thickness dependent.

Pot Life: 16 hours 8 hours 3 hours

Sweat-in Time: None required

Shelf Life: 12 months, unopened, at 77°F

Flash Point: >200°F, PMCC, mixed

Reducer: Water (up to 10% recommended)

Clean Up: Water

PERFORMANCE CHARACTERISTICS

System Tested: (unless otherwise indicated)
Substrate: Steel
Surface Preparation: SSPC-SP10
1 ct: Fast Clad DTM WB Epoxy @ 5.0 mils dft

Abrasion Resistance:
Method: ASTM D4060, CS17 wheel, 1000 cycles, 1 kg load
Result: 110 mg loss

Adhesion:
Method: ASTM D4541
Result: 1250 psi

Corrosion Weathering:
Method: ASTM D5894, 7 cycles, 1500 hours
Results: Rating 10 per ASTM D610 for Rusting (field)
Rating 10 per ASTM D714 for Blistering (field)

Direct Impact Resistance:
Method: ASTM D2794
Result: 130 in. lbs.

Dry Heat Resistance:
Method: ASTM D2485
Result: 250°F

Exterior Durability:
Method: 1 year at 45° South
Result: On test

Flexibility:
Method: ASTM D522, 180° bend, 1/8" mandrel
Result: Passes

Moisture Condensation Resistance:
Method: ASTM D4585, 100°F, 1500 hours
Result: Passes 10

Pencil Hardness:
Method: ASTM D3363
Result: HB

Salt Fog Resistance:
Method: ASTM B117, 1500 hours
Result: Passes 10

Thermal Shock:
Method: ASTM D2246, 30 cycles
Result: Passes 10

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RECOMMENDED SYSTEMS

Steel:
1 ct. Fast Clad DTM WB Epoxy @ 4.0 - 6.0 mils dft

The systems listed above are representative of the product's use. Other systems may be appropriate.

SURFACE PREPARATION

Surface must be clean, dry, and in sound condition. Remove all oil, dust, grease, dirt, loose rust, and other foreign material to ensure good adhesion.

Do not use hydrocarbon solvents for cleaning.

Refer to product Application Bulletin for detailed surface preparation information.

Minimum recommended surface preparation:
Iron & Steel: SSPC-SP6

TINTING

Tint with EnviroToner Colorants at 100% strength. Five minutes minimum mixing on a mechanical shaker is required for complete mixing of color.

APPLICATION CONDITIONS

Temperature:	50°F minimum, 100°F maximum (air, surface, and material)
	At least 5°F above dew point
Relative humidity:	85% maximum

Refer to product Application Bulletin for detailed application information.

ORDERING INFORMATION

Packaging:

Part A:	1 gallon and 4 gallons in a 5 gallon can
Part B:	1 quart and 1 gallon
Weight per gallon:	9.46 ± 0.2 lb, mixed (may vary by color)

SAFETY PRECAUTIONS

Refer to the MSDS sheet before use.

Published technical data and instructions are subject to change without notice. Contact your Sherwin-Williams representative for additional technical data and instructions.

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APPLICATION BULLETIN

Revised 4/03

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Iron & Steel
Remove all oil and grease from surface by Solvent Cleaning per SSPC-SP1. Minimum surface preparation is Commercial Blast Cleaning per SSPC-SP6. For better performance, use Near White Metal Blast Cleaning per SSPC-SP10. Blast clean all surfaces using a sharp, angular abrasive for optimum surface profile (2 mils). Prime any bare steel the same day as it is cleaned or before flash rusting occurs.

APPLICATION CONDITIONS

Temperature:	50°F minimum, 100°F maximum (air, surface, and material) At least 5°F above dew point
Relative humidity:	85% maximum

APPLICATION EQUIPMENT

The following is a guide. Changes in pressures and tip sizes may be needed for proper spray characteristics. Always purge spray equipment before use with listed reducer. Any reduction must be compatible with the existing environmental and application conditions.

Reducer ..... Water - recommended up to 10% by volume

Clean Up ..... Water

Airless Spray
- Pump 30:1
- Pressure ..... 1500 psi
- Hose ..... 1/4" ID
- Tip ..... .017" - .021"
- Filter ..... 100 mesh

Conventional Spray
- Gun ..... DeVilbiss MBC-510
- Fluid Tip ..... E
- Air Nozzle 704
- Atomization Pressure ... 40-60 psi
- Fluid Pressure ..... 10-20 psi

Brush
- Brush ..... Nylon/Polyester or Natural Bristle

Roller
- Cover ..... 3/8" woven with phenolic core

If specific application equipment is listed above, equivalent equipment may be substituted.

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APPLICATION BULLETIN

APPLICATION PROCEDURES

Surface preparation must be completed as indicated.

Mixing Instructions: Mix contents of each component thoroughly using power agitation. Make certain no pigment remains on the bottom of the can. Then combine four parts by volume of Part A with one part by volume of Part B. Thoroughly agitate the mixture with power agitation. No sweat-in time is required.

Apply paint to the recommended film thickness and spreading rate as indicated below:

Recommended Spreading Rate per coat:

Wet mils:	10.0 - 15.0
Dry mils:	4.0 - 6.0
Coverage:	107 - 160 sq ft/gal, approximate

NOTE: Brush or roll application may require multiple coats to achieve maximum film thickness and uniformity of appearance.

Drying Schedule @ 10.0 mils wet @ 50% RH:

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minimum:	6 hours	4 hours	2 hours
maximum:	30 days	30 days	30 days
To cure:	14 days	14 days	14 days

If maximum recoat time is exceeded, abrade surface before recoating. Drying time is temperature, humidity and film thickness dependent.

Pot Life:	16 hours	8 hours	3 hours

Sweat-in Time: None required

Application of coating above maximum or below minimum recommended spreading rate may adversely affect coating performance.

PERFORMANCE TIPS

Stripe coat all crevices, welds, and sharp angles to prevent early failure in these areas.

When using spray application, use a 50% overlap with each pass of the gun to avoid holidays, bare areas, and pinholes. If necessary, cross spray at a right angle

Spreading rates are calculated on volume solids and do not include an application loss factor due to surface profile, roughness or porosity of the surface, skill and technique of the applicator, method of application, various surface irregularities, material lost during mixing, spillage, overthinning, climatic conditions, and excessive film build.

Excessive reduction of material can affect film build, appearance, and adhesion.

Do not mix previously catalyzed material with new.

Do not apply the material beyond recommended pot life.

In order to avoid blockage of spray equipment, clean equipment before use or before periods of extended downtime with water.

Drying time is temperature, humidity, and film thickness dependent.

Temperatures above 77°F will shorten pot life.

Do not use hydrocarbon solvents for cleaning.

Refer to Product Information sheet for additional performance characteristics and properties.

CLEAN UP INSTRUCTIONS

Clean spills and spatters immediately with soap and warm water. Clean hands and tools immediately after use with soap and warm water. After cleaning, flush spray equipment with Mineral Spirits, R1K4, to prevent rusting of the equipment. Follow manufacturer's safety recommendations when using any solvent.

SAFETY PRECAUTIONS

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