Product Data Sheet



P851 DTM Alkyd Rust Control Metal Primer

CONCO® INTERIOR/EXTERIOR DTM ALKYD RUST CONTROL METAL PRIMER provides a fast-drying, rust-inhibitive primer for bare, previously coated and rusted steel surfaces. This high solids, low VOC primer may be used under both water base and oil base topcoats, and as a barrier coat over conventional coatings when painting with high performance topcoats. For use on steel surfaces such as machinery, equipment, bar joists, piping, siding, doors and trim. Excellent as a shop primer.

Recommended Uses

- Interior/Exterior Metal Primer
- New Construction & Industrial Maintenance Applications
- Previously Painted Surfaces
- Handrails
- Shopcoat Primer
- Universal Primer under High Performance Topcoats
- Barrier Coating over Conventional Coatings
- Machinery & Equipment
- Safety & Pipe Marking
- Suitable for Use in USDA Inspected Facilities
- Structural Steel

Performance Benefits

- Superior Corrosion Resistance
- Chemical Resistant
- May be Topcoated with High Performance Coatings: Epoxies & Urethanes
- May be Topcoated with Water Base or Alkyd Topcoats
- May be applied in temperatures as low as 40° F
- Brush, Roll or Spray
- High Film Build
- Fast Drying
- Rust Inhibitive

Certification

Master Painters Institute: MPI #79

Recommended Systems

Ferrous Metal

1 coat Conco® P851 DTM Alkyd Rust Control Metal Primer

1 or 2 coats Conco® 8500 series DTM Alkyd Gloss Industrial Enamel or

1 or 2 coats Conco® 8000 series DTM Acrylic Gloss Industrial Enamel

Technical Information

Finish: Flat

Colors: White, Gray

Drying Time (@ 4 mils wet)

 40°F
 77°F
 120°F

 To Touch:
 1 Hr
 30 Min
 10 Min

 To Handle:
 3 Hrs
 1 Hr
 15 Min

To Recoat:

48 Hrs 24 Hrs 6 Hrs Acrylics 6 Hrs Alkyds 2 Hrs 1 Hr Urethanes 24 Hrs 24 Hrs 6 Hrs To Cure: 5 Days 2 Days 1 Day

Spread Rate: 195-490 Sq. Ft. /Gal (dependant upon surface texture and porosity)

Film Thickness: 3.0 - 8.0 mils wet

2.0 - 5.0 mils dry

Volume Solids: $62\% \pm 2\%$

Weight Solids: $81\% \pm 2\%$

Weight per Gallon: 13.75 lbs

Vehicle Type: Phenolic Alkyd

Flash Point: 90°F, PMCC

V.O.C. Level: 314 g/l; 2.62 lb/gal

Reduction: Xylene

Cleanup: Xylene

Size: Available in Ones and

Fives

Warranty:

If this product, when applied according to label instructions, fails to perform to your complete satisfaction, we will either replace an equivalent quantity of product free of charge or refund the purchase price, upon presentation of proof of purchase. This warranty does not include labor or costs associated with labor for the application of any product. This warranty gives you specific legal rights, and you may have other rights, which vary from state to state.

10/2014

Surface Preparation

WARNING! Removal of old paint by sanding, scraping or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as a properly fitted respirator (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in US) or contact your local health authority.

Previously Painted Surfaces

To ensure proper adhesion, all surfaces must be clean, dry and free from wax, grease, oil, loose rust, peeling paint and other contaminants. Remove all contaminants from surface. Dull glossy, hard, smooth coatings by abrading the surface. Always wear a properly selected and fitted NIOSH/MSHA approved mask or respirator when sanding. Apply a test area of this product and test adhesion after allowing to dry for one week. If adhesion is poor, or if the previous coating is attacked by this product, removal of the previous coating may be necessary. If previous coating is peeling or in poor condition, clean surface to a sound substrate and treat as a bare steel surface. Rust inhibition requires contact of this product to the bare steel surface.

Iron and Steel

Remove all rust by hand tool cleaning per SSPC-SP2 and remove oil and grease by solvent cleaning per SSPC-SP1. For best performance use commercial blast cleaning per SSPC-SP6 with a sharp, angular abrasive. Prime bare steel within 8 hours or before flash rusting occurs.

As a Barrier Coat

Conco® P851 DTM Alkyd Rust Control Metal Primer may be used as a barrier coat for previously painted surfaces that will be topcoated with chemically resistant or strong solvent topcoats to prevent lifting. If there is evidence of poor adhesion, clean surface to bare substrate and apply appropriate system.

Mildew

Remove before painting by washing with a solution of 1 part liquid bleach and 3 parts water. Apply the solution and scrub the mildewed area. Allow the solution to remain on the surface for 10 minutes. Rinse thoroughly with water and allow the surface to dry before painting. Wear protective eyewear, waterproof gloves and protective clothing. Quickly wash off any of the mixture that comes in contact with your skin. DO NOT ADD DETERGENTS OR AMMONIA TO THE BLEACH/WATER SOLUTION.

Cleanup Information

Clean spills and spatters immediately with xylene. Clean tools immediately after use with xylene. Follow manufacturer's safety recommendations when using xylene.



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Application

Do not apply at air, surface or product temperatures below 40°F or above 120°F, or when relative humidity exceeds 85%. Temperature must be at least 5°F above dew point.

Spray - Airless

Pressure	1800 psi minimum
Hose	.1/4 – 3/8" ID
Tip	.017"019"
Filter	.60 Mesh
Reduction	.As needed up to 5% by volume

Conventional Spray...Not recommended

Brush

Use a natural bristle or nylon polyester brush Reduction not recommended

Roller application not recommended.

Note: Brush application may require multiple coats to achieve maximum film build.

The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of Conco Paints. Information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Consult your Conco Paints retailer or sales representative to obtain the most recent Product Data Sheet.

Performance Characteristics

- To ensure maximum protection, stripe coat all crevices, welds and sharp angles.
- During spray application, overlap 50% with each pass of the spray gun to avoid bare areas, pinholes and holidays.
- The spread rates are calculated by the volume solids and do not take into consideration product loss caused by applicator technique, method of application, surface irregularities, over thinning and climatic conditions.
- Excessive reduction of this product will affect film build, appearance and adhesion.
- Intimate contact with the steel surface and primer is necessary for adequate rust inhibition and adhesion.
- Spray equipment should be cleaned and flushed with xylene before use and periods of extended downtime to avoid blockages.



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Performance Characteristics

System Tested:

Substrate: Steel
Surface Preparation: SSPC-SP2

1 coat Conco® P851 DTM Alkyd Rust Control Metal Primer @ 3 mils dry film thickness 1 coat Conco® 8500 DTM Alkyd Gloss Enamel @ 3 mils dry film thickness

Abrasion Resistance (primer only)

- Method: ASTM D4060, 500 cycles, 500 gm load
- Result: 46 mg loss

Adhesion

- Method: ASTM D4541
- Result: 392 psi

Direct Impact Resistance

- Method: ASTM D2794
- Result: 60 in. lbs.

Dry Heat Resistance (primer only)

- Method: ASTM D2485
- Result: 250° F (discolors)

Flexibility (primer only)

- Method: ASTM D522, 180° bend, 1" mandrel
- Result: Passes

Moisture Condensation Resistance

- Method: ASTM D4585, 100° F, 500 hours
- Result: No blisters, rust, delamination or creepage

Pencil Hardness

- Method: ASTM D3363
- Result: H

Salt Fog Resistance

- Method: ASTM B117, 500 hours
- Result: No softening, cracking or delamination; no more than 1/32" rust creepage at scribe

Thermal Shock

- Method: ASTM D2246, 15 cycles
- Result: Passes

Product performs comparable to products formulated to federal specifications: TT-P-664