

## Quick Dry Enamel

### Technical Data Sheet (TDS)

#### Product Description

**Crown Quick Dry Enamel** is one component fast drying industrial DTM finishing enamel. Corrosion properties may be enhanced with P-Series Metal Primers. Crown Quick Dry Enamel may also be catalyzed with Polyurethane Convertor to create a hard, solvent and chemical resistant finish.

#### Product features:

- Quick drying
- Direct to Metal
- Good corrosion resistance and durability
- Available in various colors
- Lead, chromate, and heavy metal free

#### Recommended Uses

**Crown Quick Dry Enamel** is intended for industrial applications; either new build or maintenance. It is ideal for OEM finishing or refinishing “production line” environments due to its versatility and efficiency of application.

#### Industries:

- Oilfield & Energy Service
- Industrial Equipment
- Construction Equipment
- Agricultural equipment
- General Metal applications

#### Mixing

**Crown Quick Dry Enamel used as Single Component.**

**Stir each container thoroughly prior to use.**

Material is packaged at a viscosity requiring little or no reduction for application by airless spray equipment. Refer to Spray Gun Setup for other methods.

**Crown Quick Dry Enamel used as a Two Component Catalyzed Product.**

#### Mix:

8 parts by volume of Quick Dry Enamel  
1part by volume of Polyurethane convertor (BX015)

Note: Due to limited potlife, never leave catalyzed paint in spray equipment. Clean immediately. Do not spray catalyzed material with heated spray equipment.

#### Product Characteristics

#### Typical Physical Properties Single Component

**Gloss:** High 85+ GU at 60°

**Volume Solids (Single Component):** 38% +/- 2%

#### VOC Single Component (Unreduced):

##### E229 White Enamel

(EPA Method 24): 511 g/l (4.26 lb/gal)

**Note: The VOC level will vary per color.**

**Weight Gallon:** 9.86 ± 0.2 lb/gal

**Pot Life:** 10 Hours at 77°F (25°C) w/BX015 (optional)

When Used as a Two Component Catalyzed Product

**Shelf Life:** 2 years at 77°F (25°C)

**Note: For unopened product.**

#### Surface Prep

Surfaces to be finished must be clean, dry and free of dirt, oil or any contamination that would adversely affect adhesion, protective properties or appearance of the coating.

Prepare metal surfaces to SSPC-SP2, SSPC-SP3 for normal requirements.

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**Note:** for optimal corrosion resistance and adhesion, iron phosphate treatment is recommended and/or P300 Series Metal Primer.

All other substrates contact your Crown representative.

#### Application Method

Crown Quick Dry Enamel can be applied by most spray painting systems including heated systems, dip application and flowcoat processes. It can also be applied by advanced application equipment such as turbo disk or bell.

**Note:** Not recommended for brush or roller application over large areas. Small touch-up areas may be brushed.

#### Spray Gun Setup

| Feed Type          | Fluid Tip    | Application Pressures (heel of gun ) | Fluid Delivery |
|--------------------|--------------|--------------------------------------|----------------|
| Siphon Feed        | 1.6-1.8 mm   | 40-50 psi                            |                |
| Gravity Feed       | 1.6-1.8 mm   | 30-40 psi                            |                |
| Pressure Feed      | 1.4-1.8 mm   | 50-60 psi                            | 10-14 oz/min   |
| Air Assist Airless | 0.009-0.017" | 1,000-1,800 psi                      |                |
| Airless            | 0.011-0.015" | 1,700-3,000 psi                      |                |

#### Spray Viscosity

|                     |                      |
|---------------------|----------------------|
| Using a #2 Zahn Cup |                      |
| 75-80 KU 77°F       | Reduce as necessary* |
| Conventional        | Airless              |

**Note:** Spraying viscosity and thinning will depend on ambient conditions, spray equipment used, and the desired surface finish.

#### IF THINNING IS REQUIRED:

**Cool Weather: Below 65°F (18 °C)**  
**Use:** Toluol/TS100

**Normal Weather: Between 65-80°F (18-27 °C)**  
**Use:** Xylol /TS105

**Hot Weather: Above 80°F (27 °C)**  
**Use:** Xylol /TS105

SC-100 or SC-150 can be used as a retarder solvent to reduce dry spray and increase flow and leveling. Limit the level of SC-150 to 5% as a retarder solvent.

**Note:** VM&P Naphtha or Mineral Spirits should never be used.

#### Film Build

Crown Quick Dry Enamel has a recommended film build thickness of:

**Wet (unreduced): 3-6 mils wet (75-150 microns)**

**Dry: 1.0-2.0 mils dry (25-50 microns)**

Theoretical coverage at 1.0 mil (25 microns)  
 DFT: 609 ft² per gallon at 100% transfer efficiency.

#### Dry Times

|                    | 70°F (21°C)    |
|--------------------|----------------|
| <b>To Touch</b>    | 15-30 Mins     |
| <b>To Handle</b>   | 45 -60 Minutes |
| <b>To Recoat</b>   | Min 1 Hour     |
| <b>Through Dry</b> | 18 Hours       |

**Note:** Do not recoat between 4-96 hours as lifting may be encountered.

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Optimum drying conditions are 60°F to 90°F (16°C to 32°C) at 50% R.H.

Lower temperatures and high humidity will slow dry.

Surface must be dry and at least 5°F above the dew point.

**Note: Product may also be force cured to enhance dry. Force cure temperatures in the range of 110-180°F may be utilized to accelerate solvent evaporation and speed oxidation.**

### Clean Up

Clean all equipment immediately after use with xylol, aromatic solvent, acetone, or MEK for spray guns and line, pots and other equipment

Follow manufacturer's safety recommendations when using any solvent.

### Ordering Information (sizing)

Available in Aerosol, Gallon, 5-gallon, 55-gallon drum, and 300 gallon tote.

Custom colors and sizes may be available.

### Environmental Conditions

For optimum coating performance product, substrate and ambient temperature should be above 50°F (10°C). To prevent condensation during application the surface temperature must be 5°F (3°C) or more above the dew point at all times.

**Note: For use outside this range please contact your Crown Representative.**

### Specifications

| Test                 | Method     | Result  |
|----------------------|------------|---|
| Salt Spray/Corrosion | ASTM B117  | 240 hours. no field rusting, less than 1/8" creep from scribe<br>336 hours w/P315 |
| Adhesion:            | ASTM D3359 | 5A; 100% B-1000 panel   |
| Impact resistance    | ASTM D2794 | 20 lbs direct<br>10 lbs reverse   |
| Flexibility          | ASTM D522  | 1/8 mandrel bend:<br>Pass   |

### Storage Conditions

#### Storing partially used container:

Pour a small amount of the recommended thinner over the surface.

Do not stir. Replace lid securely. Store away from heat or open flame.

#### Mix thoroughly before reusing.

### Safety Precautions

Please refer to all Safety Data Sheets (SDS) before using this product. SDS sheets can be obtained by contacting Crown Paint.