

Quick Dry Enamel

Stock Colors

Technical Data Sheet (TDS)

Product Description

Crown Quick Dry Enamel is one component, fast drying industrial DTM finishing enamel. Quick Dry Enamel may be catalyzed with Polyurethane Convertor to create a hard, solvent and chemical resistant finish.

Corrosion properties may be enhanced with P-Series Metal Primers.

Product features:

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

Recommended Uses

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

Quick Dry Enamel used as Single Component.
Stir each container thoroughly prior to use.

Quick Dry Enamel

Used as a Two Component Catalyzed Product.

Mix:

8 parts by volume of Quick Dry Enamel [XXXXXX]
(Part Number varies with color)

1 part by volume of Polyurethane Convertor [X135]

Note: Due to limited pot life, 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 Unreduced)	38% ± 4%
Volume solids will vary by color	
VOC (Unreduced): EPA Method 24 E229 White Enamel	511 g/l 4.26 lb /gal
VOC content will vary with each color	
Shelf Life:	
Component A	2 years
For unopened product (77°F (25°C))	
Weight Gallon: E229 White Enamel	9.86 ± 0.2lb/gal
Used as a Two Component Catalyzed Product	
Pot Life: (77°F (25°C) and 50% RH) With Optional X135	10 Hours

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.

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

For questions regarding other substrates contact your Crown Representative.

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Application Method

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	9 -17 Thou	1,000-1,800 psi	
Airless	11-15 Thou	1,700-3,000 psi	

Spray Viscosity

Supplied Viscosity - [77°F (25°C)]	
Stormer Viscometer	75-80 KU

Note: Material is packaged at a viscosity requiring little or no reduction for application by airless spray equipment.

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

IF THINNING IS REQUIRED:

Temperature Range	Recommended Thinner
Below 65° F (18° C)	Toluol /TS100
65° F- 80° F (18-27° C)	Xylol /TS105
Above 80° F	Xylol /TS105
Above 80° F: 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: WFT	3.0 – 6.0 mils	75 – 150 microns
Unreduced		
Dry: DFT	1.0 – 2.0 mils	25 – 50 microns

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

Dry Times

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

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

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 time. Surface must be dry and at least 5°F(3°C) above the dew point.

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Note: Product may also be force cured to enhance dry. Force cure temperatures in the range of 110-180°F (43 - 82 °C) 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)

Package sizes available:

Aerosol, 1 gallon, 5 gallons, 55 gallon drum, 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.

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

Specifications

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