

## Waterborne Primer

### Technical Data Sheet (TDS)

#### Product Description

**Crown Waterborne Primer** is single component water based highly versatile primer with a wide range of features. Crown Waterborne Primer is a cost effective general purpose, fast dry primer.

#### Product features:

- Acrylic formula for interior/exterior use
- Easy application & Cleanup
- VOC Compliant
- Direct to Metal (DTM)
- Low odor
- chromate free inhibitive pigment system
- Available in various colors

#### Recommended Uses

**Crown Waterborne Primer** 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 Waterborne Primer** is a single component ready to use product.

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

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

#### Product Characteristics

##### Typical Physical Properties

**Gloss:** Eggshell <20 GU at 60°

**Volume Solids Single Component:** 34% +/- 2%

**VOC Single Component (Unreduced):**  
(EPA Method 24): **P208 White:** 89 g/l (0.7 lb/gal)  
**Note: The VOC level will vary per color.**

**Weight Gallon:** 11.2 lb/gal ± 0.2 lb/gal

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

**Note: For unopened product.**

**IMPORTANT NOTE: KEEP FROM FREEZING**

#### 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.

**All other substrates contact your Crown representative.**

#### Application Method

**Crown Waterborne Primer** can be applied by conventional air, air-assist airless, airless, or dip.

**Crown Waterborne Primer** may be brush and roll applied.

## Waterborne Primer

### Technical Data Sheet (TDS)

#### 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

80-85 KU at 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.

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

#### IF THINNING IS REQUIRED:

Use only water to thin this product.

#### Film Build

**Crown Waterborne Primer** 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: 545 ft<sup>2</sup> per gallon at 100% transfer efficiency.

#### Dry Times

	70°F (21°C)
<b>To Touch</b>	11-30 Mins
<b>To Handle</b>	1 Hour
<b>To Recoat</b>	2 Hours
<b>Through Dry</b>	18 Hours

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

**Note:** Lower temperatures and high humidity will slow dry.

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

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

#### Topcoating Information

**Crown Waterborne Primer** may be topcoated with most solventborne and waterborne products.

#### Clean Up

Clean all equipment immediately after use with water. If equipment will not be utilized for an extended period of time, do a final flush with solvent such as mineral spirits.

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### Ordering Information (sizing)

Available in 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	100 hours. no field rusting, less than 1/8" creep from scribe 240 hours with topcoat
Adhesion:	ASTM D3359	5A; 100% B-1000 panel
Impact resistance	ASTM D2794	80 lbs direct 50 lbs reverse
Flexibility	ASTM D522	1/8 mandrel bend: Pass

### Storage Conditions

**Storing partially used container:**  
 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.