

# 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. 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

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

**Waterborne Primer is a single component product.**

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

### Product Characteristics

Typical Physical Properties	
<b>Gloss:</b>	Eggshell: <20 GU at 60°
<b>Volume Solids: (Single Component Unreduced) P208 White</b>	36% ± 2%
<b>Volume solids will vary by color</b>	
<b>VOC (Unreduced): EPA Method 24 P208 White</b>	31 g/l 0.260 lb /gal
<b>VOC content will vary with each color</b>	
<b>Shelf Life:</b>	
<b>Waterborne Primer</b>	2 years
<b>For unopened product (77°F (25°C))</b>	
<b>Weight Gallon: P208 White</b>	11.2 ± 0.2lb/gal

### 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.

For questions regarding other substrates contact your Crown Representative.

### Application Method

Waterborne Primer can be applied by conventional air, air-assist airless, airless, dip, brush, and roll.

# 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	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	80 - 85 KU

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

Use only water to thin this product.

### Film Build

Waterborne Primer has a recommended film build thickness of:

<b>Wet: WFT Unreduced</b>	<b>3.0 – 5.5 mils</b>	<b>75 – 140 microns</b>
<b>Dry: DFT</b>	<b>1.0 – 2.0 mils</b>	<b>25 – 50 microns</b>

Theoretical coverage at 1.0 mil (25 microns).  
 DFT: 577 ft<sup>2</sup> per gallon at 100% transfer efficiency.

### Dry Times

	70°F (21°C)
<b>To Touch</b>	11-30 Minutes
<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. Lower temperatures and high humidity will slow dry time. Surface must be dry and at least 5°F(3°C) above the dew point.

**Note:** Product may 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

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

### Clean Up

Clean all equipment immediately after use with water. After flushing line with water, fill equipment with a polar/hydrophilic solvent such as butyl cello-solve, acetone, or MEK. When restarting spray operation, do an initial flush with water prior to filling line with waterborne primer.

### Ordering Information (sizing)

Package sizes available:  
 1 gallon, 5 gallons, 55 gallon drum,  
 300 gallon tote.  
 Custom colors and sizes may be available.

## Waterborne Primer

### Technical Data Sheet (TDS)

#### 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.**

#### Safety Precautions

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

#### 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:**

To store partially used container replace lid securely. Store away from heat or open flame.

**Mix thoroughly before reusing.**

**Keep from Freezing.**

**Store in Frost Free conditions.**