

# Zinc Dust Primer

## Technical Data Sheet (TDS)

### Product Description

**Crown Zinc Dust Primer** is fast drying, two-component industrial finishing primer intended for coating a large variety of metal products.

#### Product features:

- Quick drying
- Rust inhibitive
- Lead, chromate, and heavy metal free
- For use on ferrous metals

### Recommended Uses

Zinc Dust Primer is intended for industrial applications, either new build or maintenance. This product meets the performance requirements of TTP-641 Type II Zinc Dust Primer.

It is ideal for “production line” environments due to its versatility and efficiency.

#### Industries:

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

### Mixing

**Zinc Dust Primer is a two component product.**

#### Mix:

3 parts by volume of Zinc Dust primer A [P296A]  
 1 part by volume of Zinc Dust primer B [P296B]

**ALWAYS MIX ZINC DUST WITH LIQUID BASE.**

**Mix thoroughly before and during use with constant mechanical agitation.**

### Product Characteristics

Typical Physical Properties	
<b>Gloss:</b>	Flat: <10 GU at 60°
<b>Volume Solids Mixed: (Single Component Unreduced) P296A:P296B (3:1) Gray</b>	66% ± 1.0%
Volume solids will vary by color	
<b>VOC (Unreduced) Mixed: EPA Method 24 P296A:P296B (3:1) Gray</b>	270 g/l 2.254 lb /gal
<b>Shelf Life:</b>	
<b>Component A</b>	2 years
<b>Component B</b>	Indefinite
<b>For unopened product (77°F (25°C))</b>	
<b>Weight Gallon: P296A:P296B (3:1) Gray</b>	22.92 ± 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.

**Note: for optimal corrosion resistance and adhesion, iron phosphate treatment is recommended.**

For questions regarding other substrates contact your Crown Representative.

### Application Method

Zinc Dust Primer can be applied by most spray painting systems including heated, dip and flow-coat processes. It can also be applied by advanced application equipment such as turbo disk, bell or electrostatic and/or heated equipment.

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

# Zinc Dust 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	90 – 100 KU

**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 (27°C)	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.	
<b>Note: VM&amp;P Naphtha or Mineral Spirits may be used.</b>	

### Film Build

Zinc Dust Primer has a recommended film build thickness of:

<b>Wet: WFT Unreduced</b>	<b>3.0 – 4.5 mils</b>	<b>75 – 114 microns</b>
<b>Dry: DFT</b>	<b>1.7 – 2.6 mils</b>	<b>42 – 65 microns</b>

Theoretical coverage at 1.0 mil (25 microns).  
 DFT: 930 ft<sup>2</sup> per gallon at 100% transfer efficiency.

### Dry Times

	70°F (21°C)
<b>To Touch</b>	30 Minutes
<b>To Handle</b>	1 Hour
<b>To Recoat</b>	1 Hour
<b>Through Dry</b>	8 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 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.**

### Topcoating Information

Zinc Dust Primer may be topcoated with the entire range of Crown Topcoats.

Zinc Dust Primer must be recoated after 1 hour; check small area for lifting prior to application.

## Zinc Dust Primer

### Technical Data Sheet (TDS)

#### 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:  
Available in 4 gallon kits.

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