

Equipment Primer

Technical Data Sheet (TDS)

Product Description

Crown Equipment Primer is one component fast drying industrial finishing primer intended for coating a large variety of metal substrates. Not for use on galvanized steel.

Product features:

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

Recommended Uses

Equipment 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

Equipment Primer is a single component ready to use product.

Stir each container thoroughly prior to use.

Product Characteristics

Typical Physical Properties	
Gloss:	Flat: <10 GU at 60°
Volume Solids: P257 Red Oxide (Single Component Unreduced)	47% ± 2%
Volume solids will vary by color	
VOC (Unreduced):	418 g/l
EPA Method 24 :P257 Red Oxide	3.492 lb /gal
VOC content will vary with each color	
Shelf Life:	
Equipment Primer	2 years
For unopened product (77°F (25°C))	
Weight Gallon: P257 Red Oxide	10.59 ± 0.2lb/gal

Surface Preparation

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 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.

Application Method

Equipment Primer 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.

May be brush or rolled.

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	60 – 65 KU

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

Equipment Primer

Technical Data Sheet (TDS)

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 may be used.	

Film Build

Equipment Primer has a recommended film build thickness of:

Wet: WFT Unreduced	3.0 – 4.5 mils	75 – 115 microns
Dry: DFT	1.5 – 2.2 mils	38 – 56 microns

Theoretical coverage at 1.0 mil (25 microns).
 DFT: 753 ft² per gallon at 100% transfer efficiency.

Dry Times

	70°F (21°C)
To Touch	5-10 Minutes
To Handle	15 Minutes
To Recoat	1 Hour
Through Dry	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.

Product may 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

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

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.

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
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

Equipment Primer

Technical Data Sheet (TDS)

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.