

Chassis Black Undercoater/Enamel

Technical Data Sheet (TDS)

Product Description

Crown Chassis Black Undercoater/ Enamel is a fast dry, one component industrial finishing enamel.

Product features:

- Very quick drying and tack free times
- Quick handling time
- Low to No HAPS
- Good corrosion resistance
- Lead, Chrome, and heavy metal free
- Black only

Recommended Uses

Crown Chassis Black Undercoater / Enamel is intended for industrial applications; either new build or maintenance. Crown Chassis Black Undercoater /Enamel is intended for chassis, underbody parts, sucker rods and other metal components. need a cost-effective, protective coating. It is ideal for “production line” environments due to its versatility and quick handling properties.

Industries:

- Oilfield & Energy Services
 - Well Service vehicles
- Cranes and Construction Equipment
- Trailers
- Waste and Recycling Industry
 - Garbage Trucks

Mixing

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

Gloss: Gloss 85+ GU at 60°

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

VOC Single Component (Unreduced):
(EPA Method 24): 556 g/l (4.64 lb/gal)

Weight Gallon: 7.8 ± 0.2 lb/gal

Shelf Life: 2 years at 77°F (25°C)

Note: for unopened product

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 steel 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.

All other substrates contact your Crown representative.

Application Method

Crown Chassis Black Undercoater / Enamel can be applied by most spray painting systems including heated systems, dip application and flow coat processes. It can also be applied by advanced application equipment such as turbo disk or bell.

Follow recoats times of primer if applied prior to topcoating with **Crown Chassis Black Undercoater**.

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

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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

Using a #2 Zahn Cup	
20-30 Seconds*	Reduce as necessary*
Conventional	Airless

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

IF THINNING IS REQUIRED:

Cool Weather: Below 65°F (18 °C)

Use: Toluol /TS100

Normal Weather: Between 65-80°F (18-27 °C)

Use: Xylol /TS105

Hot Weather: Above 80°F (27 °C)

Use: Xylol /TS105

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 may be used.

Film Build

Crown Chassis Black Undercoater 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 ft² per gallon at 100% transfer efficiency.

Dry Times

	70°F (21°C)
To Touch	30 Minutes
To Handle	1 Hour
To Recoat	1 Hour
Through Dry	18 Hours

Note: Dry Times are subject to ambient conditions (temperature and humidity) and good airflow and film build of the product.

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: Product may also be force cured to enhance dry. Force cure temperatures in the range of 110-180°F may be utilized to accelerate solvent evaporation and speed oxidation.

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Clean Up

Clean all equipment immediately after use with xylol, or aromatic solvent for spray guns and line, pots and other equipment

Follow manufacturer's safety recommendations when using any solvent.

Ordering Information (sizing)

Available in Aerosol, Gallon, 5-gallon, 55-gallon drum, and 300 gallon tote.

Custom 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	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

Storage Conditions

Storing partially used container:

Pour a small amount of the recommended thinner over the surface. VM&P Naphtha or Mineral Spirits may be used. 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.