



# Corlar® 13580S™ Non-Chromate Epoxy Primer-High Build



## GENERAL

### DESCRIPTION

A chromate-free, epoxy primer that meets MIL-PRF-23377 requirements, and is designed to provide excellent adhesion and corrosion resistance for aerospace applications where a chromate-containing primer is not acceptable. It is formulated for direct-topcoat applications to deliver excellent finished appearance due to minimal primer texture. Its high build characteristics allow DFT's of 2 to 4 mils. This high-solids primer is also designed to provide productive dry times and has an RTS VOC of less than 2.8 lbs. / gal.

### RECOMMENDED USES

Corlar 13580S is recommended for use as a primer over properly treated substrates including aluminum, aluminum alloys, and steel. It is compatible with most epoxy and urethane surfacers and polyurethane topcoats. Corlar 13580S is recommended for use with:

Pre-Treatment	13206S™, Alodine® 600 or 1200 treatments
Primers	Corlar 13550S™
Topcoats	Imron® AF3500™, Imron AF400™
Basecoat/Clearcoat	Imron AF700™ / AF740™

### SPECIFICATIONS

- Meets or exceeds performance per MIL-PRF-23377J; Type I, Class N.
- Corrosion resistance surpasses 2,000 hours salt spray (AS B117) over Alodine 600

The products referenced herein may not be sold in your market. Please consult your distributor for product availability.



## MIXING

### COMPONENTS

Corlar 13580S Non-Chromate Epoxy Primer  
 Corlar 13180S™ Epoxy Activator  
 13756S™ VOC-Exempt Reducer

### MIX RATIO

Thoroughly mix 13580S prior to activation. Filter activated material prior to application.

<u>Components</u>	<u>Primer</u>	<u>Surfacer</u>
	<u>Parts by Volume</u>	<u>Parts by Volume</u>
Corlar 13580S Epoxy Primer	4	4
Corlar 13180S Epoxy Activator	1	1
13756S VOC-Exempt Reducer	1	½

### VISCOSITY

18-22 sec in a Zahn #2 cup  
 Listed ranges were established using GARDCO EZ Zahn (AS) Cups, measurements using other Zahn type cups may provide different results.

### INDUCTION TIME

30 minutes

### POT LIFE

8 hours at 70°F (21°C).

### ADDITIVES

**Anti-Crater Additive** - Add up to 1 oz. 13813S per RTS gallon



## APPLICATION

### SUBSTRATES AND SURFACE PREPARATION

Substrate must be properly prepared for application. Aluminum surfaces must be clean and water-break free, followed by conversion coatings or pretreatment.

### GUN SETUP

Corlar 13580S can be applied with conventional, HVLP, and electrostatic spray equipment using pressure or gravity fluid delivery.

#### Conventional Fluid Tip

Pressure Pot	1.2 mm-1.5 mm (.047"-.059")
Gravity Feed	1.3 mm-1.6 mm (.051"-.063")

#### HVLP

Pressure Pot	1.0 mm-1.4 mm (.039"-.055")
Gravity Feed	1.2 mm-1.5 mm (.047"-.059")

### FLUID DELIVERY

Primer	8-10 oz/min
Surfacer	12-16 oz/min

### AIR PRESSURE

Conventional	55-65 psi atomizing air
HVLP	25-35 psi atomizing air

### ENVIRONMENTAL CONDITIONS

Substrate and ambient temperature must be between 50°F (10°C) and 110°F (43°C). The substrate must be at least 5°F (3°C) above the dew point. Relative humidity should be below 90%. Heating activated material above 110°F (43°C) may cause gelation.

### APPLICATION

- Apply using a single medium-wet coat to 2 to 3 mils wet, 0.8 to 1.2 mils dry film thickness.
- For a surfacer, apply 2 medium wet coats for 3 to 4 mils dry film thickness, allow a 45 minute flash between coats.

### CLEANUP SOLVENTS

Axalta 107™ Low VOC Gun & Equipment Cleaner  
Axalta 105™ Gun & Equipment Cleaner



## DRY TIMES

### AIR DRY

At 70°F (21°C) Dependent upon Film Build

Dry to Touch	30 minutes-1 hour
Dry to Tape	2-6 hours
Dry to Topcoat	2-6 hours

### FORCE DRY

At 130°F (54°C)

Flash Before	Force Dry none required
Dry to Touch	15 minutes
Dry to Tape	1 hour
Dry to Topcoat	1 hour

### RECOAT

Recoat window is 2-24 hours for Corlar 13580S which has been air dried or force dried for up to 1 hour at 130°F (54°C). When used at higher film builds, sanding is recommended.



## PHYSICAL PROPERTIES

### VOC

	Less Exempts (LE)	As Packaged (AP)
Corlar 13580S	2.7 lbs./gal	2.3 lbs./gal
RTS Corlar 13580S as primer	2.7 lbs./gal	1.9 lbs./gal
RTS Corlar 13580S as surfacer	2.8 lbs./gal	2.1 lbs./gal

### FACTORY-PACKAGED PRIMER

Color	Light Gray
Closed Cup Flash Point	20°F-73°F
Shelf Life	2 years (Unopened at 50°-110°F)

### READY-TO-SPRAY

	Primer	Surfacer
Theoretical Coverage	674 ft <sup>2</sup> /gal at 1 mil	735 ft <sup>2</sup> /gal at 1 mil
Weight Solids	59.8%	63.5%
Volume Solids	42.0%	45.8%
Gallon Weight	10.46 lbs./gal	10.75 lbs./gal

### DRY FILM

Gloss	Eggshell to Satin
Recommended Film Thickness	0.8-1.2 mils / 2.0-4.0 mils as a surfacer

### COATING PERFORMANCE

Corrosion Resistance	Very Good
Adhesion	Excellent
Chemical and Solvent Resistance	Very Good
Weatherability w/ Topcoat	Excellent
Topcoat Holdout	Excellent
Humidity Resistance	Excellent
Flexibility	Excellent

## VOC REGULATED AREAS

These directions refer to the use of products which may be restricted or require special mixing instructions in VOC regulated areas. Follow mixing usage and recommendations in the VOC Compliant Products Chart for your area.

## SAFETY AND HANDLING

For industrial use only by professional, trained painters. Not for sale to or use by the general public. Before using, read and follow all label and MSDS precautions. If mixed with other components, mixture will have hazards of all components.

Ready to use paint materials containing isocyanates can cause irritation of the respiratory organs and hypersensitive reactions. Asthma sufferers, those with allergies and anyone with a history of respiratory complaints must not be asked to work with products containing isocyanates.

Do not sand, flame cut, braze or weld dry coating without a NIOSH approved air purifying respirator with particulate filters or appropriate ventilation, and gloves.

Revised: January 2015

In the United States:  
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