



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



## GENERAL

### DESCRIPTION

A chromate-free, epoxy primer that provides excellent adhesion and corrosion resistance for aerospace applications where a chromate-containing primer is not acceptable. It is designed for direct-topcoat applications and will deliver excellent final appearance due to extremely low texture. This high-solids primer is also designed to provide excellent build, productive dry times and good sanding characteristics.

### RECOMMENDED USES

13580S is recommended for use as a primer over properly treated aluminum, aluminum alloys, composite, fiberglass and steel substrate. It is compatible with most epoxy primers, urethane primers and polyurethane topcoats. 13580S™ is recommended for use with the following products:

Pre-Treatment	Alodine® 600 or 1200
Primers	13550S™, 13520S™
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 exceeds 2,000 hours salt spray (ASTM B117) over Alodine 600

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



## MIXING

### COMPONENTS

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

### MIX RATIO

Thoroughly mix 13580S prior to activation. It is highly recommended to filter activated material prior to application.

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

### VISCOSITY

18-22 sec in a Zahn #2 Cup  
Viscosity range was established using a GARDCO EZ Zahn (AS) Cup. Measurements using other type viscosity cups may provide a different result.

### 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



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## 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. Composite materials and fiberglass parts should be dry and free of oil, dust, or overspray. Adhesion properties can be improved by lightly scuff sanding the surface to be filled but care must be taken to not breakthrough the protective substrate of the composite or fiberglass material.

### GUN SETUP

13580S can be applied with conventional, HVLP, and electrostatic spray equipment using pressure or gravity feed 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

- DTM - Apply using a single medium-wet coat to 2 to 3 mils wet in order to achieve 0.8 to 1.2 mils DFT
- SURFACER - Apply two medium wet coats to 5.0 to 7.5 mils wet with a 45-minute flash between coats in order to achieve a 2-3 mils DFT.

### CLEANUP SOLVENTS

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



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## DRY TIMES

### AIR DRY

At 70°F (21°C) Dependent upon Film Build	
Dry to Touch	30-60 minutes
Dry to Tape	2-6 hours
Dry to Topcoat	2-6 hours

### FORCE DRY

At 130°F (54°C)	
Flash Before	not required
Dry to Touch	on cool down
Dry to Tape	1 hour
Dry to Topcoat	1 hour



### RECOAT

- Up to 24 hours when used as a DTM Primer.
- Sanding is always recommended when applying at higher film build.



## PHYSICAL PROPERTIES

### VOC

	Less Exempts (LE)	As Packaged (AP)
13580S	2.7 lbs./gal	2.3 lbs./gal
RTS 13580S DTM	2.7 lbs./gal	1.9 lbs./gal
RTS 13580S 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

	DTM	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 PROPERTIES

Gloss	Eggshell to Satin
Recommended Dry Film Thickness: as a DTM:0.8-1.2 mils or as a SURFACER:1.5- 2.0 mils after sanding	

### COATING PERFORMANCE

Corrosion Resistance	Very Good
Adhesion	Excellent
Chemical and Solvent Resistance	Very Good
Weathering 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.

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In the United States:  
**1.855.6.AXALTA**  
**axalta.us**

In Canada:  
**1.800.668.6945**  
**axalta.ca**

