



# Corlar® 18510S™ | 18513S™ Epoxy Primer



## GENERAL

### DESCRIPTION

An epoxy sanding primer-surfacer designed to provide a level, texture-free surface for single or multi-stage topcoats. It has been formulated to sand easily while providing productive dry times and excellent topcoat holdout. This high-solids primer has a ready-to-spray VOC of less than 2.8 lbs./gal.

Corlar 18510S Off White can be mixed in any ratio with Corlar 18513S Gray to achieve various primer shades.

### RECOMMENDED USES

Corlar 1851XS Epoxy Primer is recommended for use above the waterline as a sanding surfacer over properly sanded gelcoat, faired and/or primed substrates. It is compatible with most epoxy primers and polyurethane topcoats. It can be used over most aged and hard cured coatings in good condition that have been thoroughly abraded with 240-280 grit sand paper or over cured faring compounds thoroughly sanded with 180 grit sandpaper.

Corlar 1851XS Epoxy Primer is recommended for use with:

Topcoats: Imron® MS600™, Imron MS100™

Primers: Corlar 18513S, 18515S™, 18530S™

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



## MIXING

### COMPONENTS

Corlar 18510S Epoxy Primer-Off White

Corlar 18513S Epoxy Primer-Gray

Corlar 18110S™ Epoxy Activator

18710S™ VOC Exempt Reducer

### MIX RATIO

Thoroughly mix Corlar 1851XS Epoxy Primer prior to activation. Filter activated material prior to spray application.

#### Finish Primer

Corlar 18510S |18513S Epoxy Primer Mixture

Corlar 18110S Epoxy Activator

18710S™ VOC-Exempt Reducer

#### Parts by Volume

4

1

1

#### High Build Primer

Corlar 18510S |18513S Epoxy Primer Mixture

Corlar 18110S Epoxy Activator

#### Parts by Volume

4

1

### VISCOSITY

Finish Primer - Viscosity will be 10 - 13 seconds in a Zahn #3 cup.

High Build Primer – Viscosity will be 27 – 30 seconds in a Zahn #3 cup.



### INDUCTION TIME

Induction time is 30 minutes.

### POT LIFE

Pot life is 4 hours at 70°F (21°C), approximately 2 hours at 90°F.

### ADDITIVES

For temperatures below 70°F, 18810S™ Epoxy Cold Weather Accelerator can be used to replace up to 50% of the 18710S™ VOC Exempt Reducer to speed dry time.

For example:

Component	Parts by Volume
Corlar 1851XS	4
Corlar 18110S™	1
18710S	½
18810S	½

Use of 18810S will shorten pot life of Corlar 1851XS Epoxy Primer.



---

## APPLICATION

### SUBSTRATES AND SURFACE PREPARATION

Substrate must be properly prepared for application including scuff sanding and cleaning. When applying over fairing or primer, follow cure and recoat window guidelines to ensure proper adhesion. Scuff sand as required. For gelcoat, prepare surface by sanding 240 grit DA / 320 grit hand sand, followed by cleaning. Use appropriate Axalta Cleaners.

### ENVIRONMENTAL CONDITIONS

Substrate and ambient temperature must be between 55°F (13°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.

### GUN SETUP

Corlar 1851XS Epoxy Primer can be applied with conventional, HVLP, and electrostatic spray equipment using pressure or gravity fluid delivery.

#### Conventional

Pressure Pot  
Gravity Feed

#### Fluid Tip

1.2 mm – 1.6 mm (.047" - .063")  
1.4 mm – 1.8 mm (.055" - .071")

#### HVLP

Pressure Pot  
Gravity Feed

1.2 mm – 1.6 mm (.047" - .063")  
1.4 mm – 1.8 mm (.055" - .071")

### FLUID DELIVERY

Conventional  
HVLP

12-16 oz./minute  
12-16 oz./minute

### AIR PRESSURE

Conventional  
HVLP

50-60 psi atomizing air  
25-30 psi atomizing air

### APPLICATION

Apply using a full-wet coat to achieve 2.5 - 4.0 mils wet film thickness. Point-to-point flash time between coats should be at least 20 minutes. Apply a second full-wet coat of 2.5 – 4.0 mils wet film thickness. Total film thickness should be 2.5 – 4.0 mils dry.

Note: For High Build activation, flash time between coats should be at least 40 minutes.



**CLEANUP SOLVENTS**

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



**DRY TIMES**

At 70°F (21°C)  
 Dry to Touch 2 - 4 hours  
 Dry to Sand 8 - 12 hours

**RECOAT**

Prior to topcoat application, sand with 240-grit or finer using a dual action orbital sander. For optimal topcoat appearance, sand or finish sand with 320-grit or higher. Corlar 1851XS Epoxy Primer must be sanded prior to topcoat application for proper adhesion. Apply topcoat within 5-7 days from final sanding @ 80°F. Sand with 280 grit or 320 grit, then topcoat. Over 7 days, sand with 240-280 grit and recoat with itself, refer to mixing and application areas of this TDS(1851XXS).



**PHYSICAL PROPERTIES**

**VOC**  
 RTS Corlar 1851XS Epoxy Primer

	<u>Less Exempts (LE)</u>	<u>As Packaged (AP)</u>
	2.7 lbs/gal	2.1 lbs/gal

**FACTORY PACKAGED PRIMER**

Color	Corlar 18510S	Off-White/pink
	Corlar 18513S	Gray
Closed Cup Flash Point		20°F - 73°F
Shelf Life		2 years (Unopened at 50°-110°F)

**READY-TO-SPRAY**

	<u>Finish Primer</u>	<u>High Build Primer</u>
Theoretical Coverage at 1 mil dft	730 ft <sup>2</sup> /gal	881 ft <sup>2</sup> /gal
Weight Solids	61.0%	71.5%
Volume Solids	46.0%	54.9%
Gallon Weight	11.35 lbs/gal	11.69 lbs/gal

**DRY FILM**

Gloss	Satin
Recommended Film Thickness	2.0 – 6.0 mils DFT

**COATING PERFORMANCE**

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



---

## 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. Do not allow material or overspray to enter drains or waterways.

**Revised: September 2015**

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

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

