Corlar® 18510S™ / 18513S™ Epoxy Primer

Type

Corlar® 18510S™ / 18513S™ Epoxy Primer is a sanding epoxy primer-surfacer.

Description

DuPont™ Corlar® 18510S™ / 18513S™ Epoxy Primer is a sanding primer that provides 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 may be used over most aged and hard cured coatings in good condition.

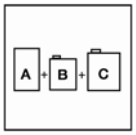
Corlar® 1851XS™ Epoxy Primer is recommended for use with:

Fairings:	DuPont™ 18545S™, DuPont™ 18550S™
Topcoats:	Imron® MS600™, Imron® MS100™
Primers:	Corlar® 18513S, DuPont™ 18515S™, DuPont™ 18530S, DuPont™ 18560S™, Corlar® 18570S™

General Information for Use

Components

Corlar® 18510S™ Epoxy Primer-Off White
Corlar® 18513S™ Epoxy Primer-Gray
Corlar® 18110S™ Epoxy Activator
DuPont™ 18710S™ VOC Exempt Reducer



Mix Ratio

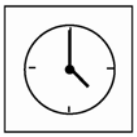
Thoroughly mix Corlar® 1851XS™ Epoxy Primer prior to activation. Filter activated material prior to spray application.

Finish Primer	*Parts by Volume*
Corlar® 18510S™ /18513S™ Epoxy Primer Mixture	4
Corlar® 18110S™ Epoxy Activator	1
DuPont™ 18710S™ VOC-Exempt Reducer	1

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

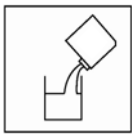
High Build Primer	Parts by Volume
Corlar® 1851XS™ Epoxy Primer Mixture	4
Corlar® 18110S™ Epoxy Activator	1

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



Pot Life and Induction Time

Pot life is 4 hours at 70°F (21°C), approximately 2 hours at 90°F. Induction time is 30 minutes



Additives/Accelerator:

For temperatures below 70°F, DuPont™ 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
DuPont™ 18710S™	½
DuPont™ 18810S™	½

Use of DuPont™ 18810S™ will shorten pot life of Corlar® 1851XS™ Epoxy Primer

Guidelines for Use

Substrates and Surface Preparation

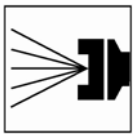
Substrate must be properly prepared for application including scuff sanding and cleaning. When applying over fairing or primer, follow cure and recoat window guidelines to ensure proper adhesion. Scuff sand as required. For gelcoat, prepare surface by sanding 240 grit DA / 320 grit hand sand, followed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

DuPont™ 18238S™ Cleaner
DuPont™ 18248S™ Waterborne Cleaner
DuPont™ 18258S™ Cleaner – High Temp

Gun Setup

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

Conventional Fluid Tip	
Pressure Pot	1.2 mm – 1.6 mm (.047” - .063”)
Siphon Feed	1.4 mm – 1.8 mm (.055” - .071”)
Gravity Feed	1.4 mm – 1.8 mm (.055” - .071”)
HVLP	
Pressure Pot	1.2 mm – 1.6 mm (.047” - .063”)
Siphon Feed	1.4 mm – 1.8 mm (.055” - .071”)
Gravity Feed	1.4 mm – 1.8 mm (.055” - .071”)

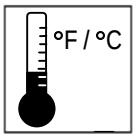


Fluid Delivery

Conventional	12 – 16 oz/min
HVLP	12 – 16 oz/min

Air Pressure

Conventional	50 – 60 psi atomizing air
HVLP	25 – 30 psi atomizing air

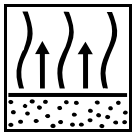


Environmental Conditions

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.

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.



Dry Times

Air Dry 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.

Cleanup Solvents

DuPont™ 105™ Thinner or DuPont™ 106™ Thinner

Physical Properties

VOC	*Less Exempts (LE)*	*As Packaged (AP)*
RTS Corlar® 1851XS™ Epoxy Primer	2.7 lbs/gal	2.1 lbs/gal

Factory-Packaged Primer

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

Ready-to-Spray	*Finish Primer*	*High Build Primer*
Theoretical Coverage at 1 mil dft	730 ft^2/gal	881 ft^2/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 dry

Coating Performance

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

Safety and Handling

For industrial use only by professional, trained painters. Nor for sale to 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.

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Revised 8/2010