

DuPont™ Corlar® 13550S™ Corrosion-Resistant Epoxy Primer

Type

Corlar® 13550S™ is a strontium-chromate based, corrosion-resistant epoxy primer.

Description

Corlar® 13550S™ provides excellent corrosion resistance, adhesion, and Skydrol* resistance for aerospace applications. Formulated for direct-topcoat applications, it facilitates excellent finished appearance due to minimal primer texture. This high-solids primer also provides productive dry times and has a ready-to-spray VOC of less than 2.9 lbs/gal.

Recommended Uses

Corlar® 13550S™ 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® 13550S™ is recommended for use with:

Pre-Treatment	Alodine* 600 or 1200 (DuPont® 13206S™), DuPont® 13238S™
Topcoats	Imron® AF3500™, Imron® AF400™
Basecoat/Clearcoat	Imron® AF700™
Surfacers	Corlar® 13560S™, URO® 13520™

General Information for Use

Components

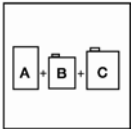
Corlar® 13550S™ Corrosion-Resistant Epoxy Primer
Corlar® 13150S™ Epoxy Activator
DuPont 13756S™ VOC-Exempt Reducer



Mix Ratio

Thoroughly mix Corlar® 13550S™ prior to activation. Filter activated material prior to spray application.

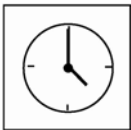
<i>Three Component System</i>	<i>Parts by Volume</i>
Corlar® 13550S™ Corrosion-Resistant Epoxy Primer	3
Corlar® 13150S™ Epoxy Activator	1
DuPont 13756S™ VOC-Exempt Reducer	2



Viscosity will be 16 - 18 seconds in a Zahn #2 cup.

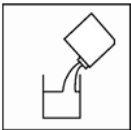
Pot Life and Induction Time

Pot life is 10 hours at 70°F (21°C).
Induction time is 30 minutes.



Additives

Anti-Crater Additive DuPont 13813S™ (up to 1 ounce per ready-to-spray gallon)
Do not use FEE





Application

Substrates and Surface Preparation

Substrate must be properly prepared for application. Aluminum surfaces must be clean and water-break free, followed by conversion coating or pre-treatment. For best results, aluminum should be converted following the recommended Alodine 600 or Alodine 1200 process (see product data sheets for DuPont Pre-Treatments). If Alodine cannot be used due to facility constraints, pre-treatment may be achieved with DuPont 13238S™ Epoxy Pre-Treatment.



Gun Setup

Corlar® 13550S™ can be applied with conventional, HVLP, and electrostatic spray equipment using pressure, siphon, or gravity fluid delivery.

Conventional

Pressure Pot
Siphon Feed
Gravity Feed

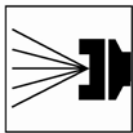
Fluid Tip

1.2 mm – 1.5 mm (.047" - .059")
1.2 mm – 1.5 mm (.047" - .059")
1.3 mm – 1.6 mm (.051" - .063")

HVLP

Pressure Pot
Siphon Feed
Gravity Feed

1.0 mm – 1.4 mm (.039" - .055")
1.0 mm – 1.4 mm (.039" - .055")
1.2 mm – 1.5 mm (.047" - .059")

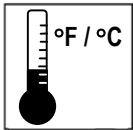


Fluid Delivery

Conventional 8 – 10 ozs/min
HVLP 8 – 10 ozs/min

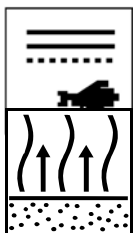
Air Pressure

Conventional 50 – 60 psi atomizing air
HVLP 25 – 30 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 achieve 0.5 – 1.0 mils dry film thickness (1.5 – 3.0 mils wet).

Dry Times

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

Air Dry at 70°F (21°C)

Dry to Touch 30 minutes
Dry to Tape 2 hours
Dry to Topcoat 2 hours



Recoat

Recoat window is 48 hours for Corlar® 13550S™ which has been either air dried or force dried for up to 1 hour at 130°F (54°C).



Aviation Finishes



Cleanup Solvents

DuPont 13920S™ Low-VOC Cleaner

DuPont 13942S™ Reducer

Physical Properties

VOC

Corlar® 13550S™

Less Exempts (LE)

2.8 lbs/gal

As Packaged (AP)

2.5 lbs/gal

Ready-to-Spray Corlar® 13550S™

2.8 lbs/gal

1.5 lbs/gal

Factory-Packaged Primer

Color

Green

Closed Cup Flash Point

20°F – 73°F

Shelf Life

2 years (Unopened at 50° – 110°F)

Ready-to-Spray

Theoretical Coverage

530 ft²/gal at 1 mil dry film thickness

Weight Solids

48%

Volume Solids

33%

Gallon Weight

11.2 lbs/gal

Dry Film

Gloss

Eggshell to Satin

Recommended Film Thickness

0.5 – 1.0 mils

Coating Performance

Corrosion Resistance

Excellent

Adhesion

Excellent

Skydrol Resistance

Excellent

Chemical and Solvent Resistance

Very Good

Weatherability w/ Topcoat

Excellent

Topcoat Holdout

Excellent

Humidity Resistance

Excellent

Flexibility

Excellent

Specifications

Meets or exceeds performance per MIL-P-23377G; Type I, Class C.

Corrosion resistance surpasses 3,000 hours salt spray (ASTM B117) over Alodine 600.

Safety and Handling

DuPont is committed to helping you develop and maintain a safe working environment. Carefully read the specific warnings and precautions printed on the labels and material safety data sheets (MSDS) of all DuPont products before handling and using. These products are for industrial use by trained professional painters only. Do not permit anyone in the painting area without protective equipment per product MSDS.

Revised 8/2005



Aviation Finishes