



Corlar® 13550S™ Corrosion-Resistant Epoxy Primer



GENERAL

DESCRIPTION

A strontium-chromate based corrosion-resistant epoxy primer designed to provide excellent adhesion and corrosion resistance for aerospace applications. It is formulated for direct-topcoat applications and to deliver excellent finished appearance due to minimal primer texture. This high-solids primer is also formulated to provide productive dry times and has a ready-to-spray VOC of less than 336 g/L.

Corlar® 13550S™ is a MIL-PRF-23377J; Type I, Class C2 approved primer.

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	13206S™, Alodine® 600 or 1200, 13238S™
Topcoats	Imron® AF3500™ / AF400™
Basecoat/Clearcoat	Imron AF700™ / AF740™
Surfacers	Corlar® 13580S™

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



MIXING

COMPONENTS

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

MIX RATIO

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

Components	Parts by Volume
Corlar® 13550S™ Epoxy Primer	3
Corlar® 13150S™ Epoxy Activator	1
13756S VOC-Exempt Reducer	2

VISCOSITY

17-21 seconds in a Zahn #2 cup at 21°C.

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

10 hours at 21°C

ADDITIVES

Anti-crater additive

- Up to 8 g 13813S™ per RTS litre
- Do not use FEE



APPLICATION

ENVIRONMENTAL CONDITIONS

Substrate and ambient temperature must be between 10°C and 45°C. The substrate must be at least 3°C above the dew point. Relative humidity should be below 90%. Heating activated material above 43°C may cause gelation.

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 pretreatment. For best results, aluminum should be converted following the recommended 13206S™, Alodine® 600 or Alodine® 1200 process (see product data sheets for pre-treatments). If conversion cannot be used due to facility constraints, pre-treatment may be achieved with 13238S™ Epoxy Pre-Treatment.

GUN SETUP

Corlar® 13550S™ 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
Gravity Feed	1.3 mm-1.6 mm

HVLP

Pressure Pot	1.0 mm-1.4 mm
Gravity Feed	1.2 mm-1.5 mm

FLUID DELIVERY

Conventional	240-300 mL/minute
HVLP	240-300 mL/minute

AIR PRESSURE

Conventional	3.4-4.1 bar
HVLP	1.7-2.1 bar

APPLICATION

Apply using a single medium-wet coat to achieve 15-25 µm dry film thickness (40-75 µm wet).

CLEANUP SOLVENT

Duxone® Gun Wash Solvent



DRY TIMES

AIR DRY AT 21°C

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

FORCE DRY AT 55°C

Flash not required before force dry	
Dry to Touch	15 minutes
Dry to Tape	1 hour
Dry to Topcoat	1 hour

RECOAT

Recoat window is 48 hours for Corlar® 13550S™ which has been either air dried or force dried for up to 1 hour at 55°C.



PHYSICAL PROPERTIES



VOC	Less Exempts (LE)	As Packaged (AP)
Corlar® 13550S™	336 g/L	300 g/L
RTS Corlar® 13550S™	336 g/L	180 g/L

FACTORY-PACKAGED PRIMER

Colour	Green
Closed Cup Flash Point	7°C - 23°C
Shelf Life	3 years (Unopened at 10°-45°C)

READY-TO-SPRAY

Theoretical Coverage	13 m ² /L at 25 µm dry film thickness
Weight Solids	48%
Volume Solids	33%
Specific Gravity	1.34 g/mL

DRY FILM

Gloss	Eggshell to Satin
Recommended Film Thickness	15-25 µm

COATING PERFORMANCE

Corrosion Resistance	Excellent
Adhesion	Excellent
Chemical and Solvent Resistance	Very Good
Weatherability with 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 SDS 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 an approved air purifying respirator with particulate filters, complying with AS/ANZ 1716:2012 and gloves.