

# Aerodur HS 2118

## Chrome Free Primer

### Technical Data Sheet

#### Product Group

Corrosion inhibiting epoxy primer.

#### Characteristics



Product  
Information

A high solid, polyurethane compatible, hydraulic fluid resistant maintenance primer for application to aircraft exterior surfaces. Aerodur HS 2118 provides excellent corrosion protection and optimizes the system adhesion of the exterior decoration finish. May be used as a direct to metal (DTM) primer.

Offers a sustainable coating system that includes safer work environment, reduction in costs, regulatory compliance and waste reduction.

#### Components



Curing Solution  
Thinner /  
Activator

Curing Solution CS6035  
Activator A9190  
Optional Thinner C25/90S or TR-114

#### Specifications



Qualified  
Product List

SAE AMS 3095A

Systems:

Metaflex SP 1050 – Aerodur HS 2118 – AeroBase – Aviox Clear Coat UVR  
Metaflex SP 1050 – Aerodur HS 2118 – Aerodur 3001 – Aerodur 3002  
Metaflex SP 1050 – Aerodur HS 2118 – Eclipse  
DTM\* – Aerodur HS 2118 – Eclipse

\*DTM = Direct To Metal

For most recent up-date or missing specifications please check the qualified product list (QPL) on [www.akzonobel.com/aerospace](http://www.akzonobel.com/aerospace).

# Aerodur HS 2118

## Chrome Free Primer

### Surface Conditions



Cleaning

Surface cleaning or pretreatment is an essential part of the painting process.

Options:

- Pretreat surface with Metaflex SP 1050 water based surface pretreatment. Refer to Metaflex SP 1050 Technical Data Sheet and Product Application Sheets for detailed instructions on the cleaning and surface pretreatment process.

Or alternatively,

- DTM application: Scotch-Brite® abrade the surface and solvent clean with 98068. Apply the Aerodur HS 2118 directly to metal.

Refresh primer:

Aerodur HS 2118 can be used as refresh primer. After reactivation of the aged system it can be used on top of:

Primer	Sanding Surfacers	Topcoat
Aerodur HS 2118	Alumigrip 10P30-8	Aerodur 3002
Aerodur LV 2114	Alumigrip 4001	Aviox Finish 77702
Aerodur 2111		Aviox Clear Coat UVR
Aerodur CF primer 37047		Eclipse topcoat
Aviox HS primer 37098		
10P20-44MNF		
EP-0215		

### Instruction for Use



Mixing Ratio  
(volume)

4 parts  
1 part  
1 part

Aerodur HS 2118  
Curing Solution CS6035  
Activator A9190

1 part

Optional Thinner C25/90S or Thinner TR-114\* (For higher temperatures, for superior flow on Scotch-Brite / Solvent cleaned substrate.

**Note:** VOC change on page 5

TR-114 is a VOC exempt and HAPS free thinner

# Aerodur HS 2118

## Chrome Free Primer



Note

**Follow mixing instructions as indicated below:**

**Order of addition of components:**

**Step 1: Base + Curing Solution: stir**

**Step 2: Add Activator: stir thoroughly until the 3 components are a homogeneous mixture.**

- Stir or shake base until all pigment is uniformly dispersed before adding curing solution and activator.
- Add curing solution to base component and stir thoroughly for at least 1 minute.
- Add the activator and stir the catalyzed mixture thoroughly.
- **Note:** In case optional thinner is used: add together with the activator and follow the mixing instructions.



Induction Time

15 minutes



Initial Spraying  
Viscosity  
(25°C/77°F)

24 – 36 seconds ISO-Cup 4 (Without optional thinner)  
17 – 21 seconds Zahn-Cup 2 (Without optional thinner)

15 – 25 seconds ISO-Cup 4 (With optional thinner)  
13 – 17 seconds Zahn-Cup 2 (With optional thinner)



Note

Viscosity measurements are provided as guidelines only and are not to be used as quality control parameters. Certified information is provided by certification documentation available on request.



Pot life  
(25°C/77°F)

2 hours



Dry Film  
Thickness  
(DFT)

15 – 35 μm  
0.6 – 1.4 mil

# Aerodur HS 2118

## Chrome Free Primer

### Application Recommendations



Conditions

Temperature: 15 – 35°C  
59 – 95°F  
Relative Humidity: 35 – 70%



Note

The quality of the application of all coatings will be influenced by the spray equipment chosen and the temperature, humidity, and air flow of the paint application area. When applying the product for the first time, it is recommended that test panels be prepared in order to identify the best equipment settings to be used in optimizing the performance and appearance of the coating.



Equipment

- Conventional / HVLP	Nozzle / Tip Size	1.2 – 1.5
	Air pressure	2 – 2.5 bar 29 – 36 psi
- Low pressure electrostatic	Nozzle / Tip Size	1.2
	Flow rate	280 – 300 ml / min
	Atomizing air pressure	4 – 4.5 bar 58 – 65 psi
	Nozzle / Tip Size	1.5
	Flow rate	230 – 260 ml / min
	Atomizing air pressure	4 – 4.5 bar 58 – 65 psi
- High pressure electrostatic	Nozzle / Tip Size	609, 611 or 613
	Flow rate	260 – 300 ml / min
	Fluid pressure	2.5 – 3 bar 36 – 44 psi
	Atomizing air pressure	4 – 4.5 bar 58 – 65 psi



Number of Coats

Spray a single uniform wet coat to a dry film thickness of 15 – 35 µm (0.6 – 1.4 mil).



Cleaning of Equipment

Solvent Cleaner C28/15, Solvent Cleaner 98068, MEK or Acetone.

# Aerodur HS 2118

## Chrome Free Primer

### Physical Properties



Drying Times  
(25 +/- 2°C / 77  
+/- 2°F, 55 +/- 5%  
RH)

Dry to topcoat 3 hours  
Dry to tape 3 - 4 hours  
Dry to sand 4 hours

Maximum recoat window with no reactivation required: 96 hours



Note

For sanding, grade P320 paper is advised. If the maximum recoat window is exceeded, condition surface with e.g. Scotch-Brite® type A Very Fine.



Theoretical Coverage

29 m<sup>2</sup> per liter mixed paint at 20 µm dry film thickness.  
1184 ft<sup>2</sup> per gallon at 0.8 mil dry film thickness.



Dry Film Weight

1.78 g/m<sup>2</sup>/µm.  
0.00926 pounds / ft<sup>2</sup>/ mil.



Volatile Organic Compounds

Per European guidelines, including exempt solvent:

Mixture	Standard 4:1:1	Additional C25/90S 4:1:1:1
VOC (Max)	350 g/l 2.91 lbs/gal	421 g/l 3.51 lbs/gal
<b>Theoretical coverage at 20 µm / 0.8 mil DFT</b>	29 m <sup>2</sup> /l 1184 ft <sup>2</sup> /gal	25.1 m <sup>2</sup> /l 1007 ft <sup>2</sup> /gal

Per USA guidelines:

Mixture	Standard 4:1:1	Additional C25/90S 4:1:1:1	Additional TR-114 4:1:1:1
VOC (Max)	324 g/l 2.70 lbs/gal	403 g/l 3.36 lbs/gal	324g/l 2.70 lbs/gal
<b>Theoretical coverage at 20 µm / 0.8 mil DFT</b>	29 m <sup>2</sup> /l 1184 ft <sup>2</sup> /gal	25.1 m <sup>2</sup> /l 1007 ft <sup>2</sup> /gal	25.1 m <sup>2</sup> /l 1007 ft <sup>2</sup> /gal

# Aerodur HS 2118

## Chrome Free Primer



Color

Beige



Flash-point

Aerodur HS 2118	22°C / 72°F
Curing Solution CS6035	31°C / 88°F
Activator A9190	-4°C / 25°F
C25/90S	-4°C / 25°F
TR-114	-17°C / 1°F



Storage

Store the product dry and at a temperature between 5 and 38°C / 40 and 100°F per AkzoNobel Aerospace Coatings specification. Store in the original unopened containers. Storage temperature may vary per OEM specification requirements. Refer to container label for specific storage life information.

Shelf life  
5 - 38°C  
(40 - 100°F)

12 months Aerodur HS 2118, Curing Solution CS6035, Activator A9190 and TR-114 per AkzoNobel Aerospace Coatings commercial specification and 24 months for C25/90S. Shelf life may vary due to OEM specification requirements. Refer to container label for specific shelf life information.

### Safety Precautions

Comply with all local safety, disposal and transportation regulations. Check the Material Safety Data Sheet (MSDS) and label of the individual products carefully before using the products. The MSDS's are available on request.

**Issue date: July 2015 (supersedes June 2015) - FOR PROFESSIONAL USE ONLY**

**IMPORTANT NOTE** The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws; any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given is subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

Brand names mentioned in this data sheet are trademarks of or are licensed to AkzoNobel.

Scotch-Brite® is a registered trademark of the 3M Company.