

Technical Data Sheet

Product Group

Characteristics



Product Information

Epoxy Primer

Aerodur HS 2121 CF Primer is a 3-component, chromate-free, low VOC (High Solids), amine-cured epoxy primer for exterior use as a refreshing primer.

- -Developed to meet all Airbus exterior system specifications, including the selective strippable intermediate coat systems.
- -Highly chemical resistant against e.g. hydraulic fluids.
- -Excellent adhesion performance to uncoated metals (e.g. rivets) and aged reactivated coating systems, with and without the OEM-prescribed pretreatments.
- -Available in two colors; beige for use in combination with the intermediate coat to see the contrast, and off-white for optimized process-ability when applying a light-colored topcoat or basecoat.

Components



Base Aerodur HS 2121 CF Primer

Curing Solution Hardener 6040
Activator Activator A9026

Specifications



Qualified Product List

 Airbus
 AIMS 04-04-031

 Airbus
 AIMS 04-04-032

 Airbus
 AIMS 04-04-033

 Airbus
 AIMS 04-04-034

 Airbus
 AIMS 04-04-037

Product specifications are constantly changing, to ensure the most accurate information regarding specifications, please check our online qualified product list (QPL) at aerospace.akzonobel.com/products.

Surface Conditions



Surface Preparation/ Cleaning

- -Clean aged basic primer or epoxy/polyurethane finishes with Solvent Cleaning 98068 or similar, and sand to a uniform and matt surface using grade P320 sanding paper or aluminum oxide non-woven abrasive pad.
- -Rivets and fasteners should be cleaned with Solvent Cleaning 98068 or similar and activated with an aluminum oxide non-woven abrasive pad prior to application of Aerodur HS 2121 CF Primer.
- -Remove dust with clean tack rags.
- -Aerodur HS 2121 CF Primer is compatible with OEM-approved 10PEG1 type sol-gel pre-treated surfaces.



Instruction for Use



Spray Application (Mix Ratio)

| | Volume | Weight |
|---------------------------|---------|-----------|
| Aerodur HS 2121 CF Primer | 5 parts | 100 parts |
| Hardener 6040 | 1 part | 12 parts |
| Activator* | 1 part | 10 parts |

- * Activator options: Activator A9026
- -Ensure all components are acclimatized to ambient conditions before using them.
- -When mixed volumes of <1L are used it is strongly advised to dose by weight to eliminate mixing ratio failures.
- -Homogenize the base component until all pigment is uniformly dispersed before adding hardener and activator.
- -Add Hardener 6040 to base component and stir thoroughly until a homogeneous mixture.
- -Add Activator A9026 and stir the catalyzed mixture thoroughly until a homogeneous mixture.



Induction Time

Not applicable. The product can be used directly after mixing.



Initial Spraying Viscosity (23°C/73°F)

18 - 30 seconds ISO Cup #4

12 - 16 seconds Gardner Signature Zahn Cup #2

Measured within 30 seconds after mixing.

Briefly stir or shake the mixed components thoroughly before measuring the viscosity.



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 (23°C/73°F)

2 hours



Dry Film Thickness (DFT)

15 – 25 μm 0.6 – 1 mil

Application Recommendations



Conditions

Temperature: 15 – 35 °C 59 – 95 °F

Relative Humidity: 35 – 75 %



Note

Aerodur HS 2121 CF Primer may be applied in conditions outside the limits shown above. Care must be exercised to ensure a satisfactory result. Please contact your local AkzoNobel Aerospace Coatings representative to determine the appropriate application techniques when environmental conditions fall outside of the recommended range.





Equipment Recommendation

| Spray gun type | Product supply | Fluid Pressure | Nozzle orifice | Product flow | Dynamic air pressure at gun- inlet * |
|------------------------------------|----------------|---|---------------------------------------|----------------------------------|--|
| Conventional | N/A | N/A | 1.2 – 1.5 mm | 260 - 300 mL/min ¹ | 4 – 4.5 bar / 58 – 65 psi² |
| HVLP / Next Generation | N/A | N/A | 1.2 – 1.5 mm | 260 – 300 mL/min ¹ | 2 – 2.5 bar / 29 – 36 psi³ |
| Air Atomizing (electrostatic) | N/A | N/A | 1.2 – 1.5 mm | 260 – 300 mL/min | 4 – 4.5 bar / 58 – 65 psi² |
| Pressure Atomizing (electrostatic) | N/A | 65-75 bar / 1.02 kpsi, 25-35 bar / 0.43 kpsi | 0.009 inch / 60°, 0.013 inch / 60° | N/A | 4 – 4.5 bar / 58 – 65 psi² |

¹Product Flow is not applicable when using gravity/suction feed guns.

Please validate with your local authorities.



Number of Coats

Spray-apply a homogeneous, wet and closed coat in order to achieve a dry film thickness of $15-25~\mu m$ / 0.6-1.0~mil



Cleaning of Equipment

Use Solvent Cleaning C28/15 or Solvent Cleaning 98068.



Note

The quality of the application of all coatings will be influenced by the spray equipment chosen and the temperature, humidity, and airflow of the paint application area.

When applying the product for the first time, it is recommended that test panels be prepared to identify the best equipment settings to be used in optimizing the performance and appearance of the coating.

Physical Properties



Drying Times

| 23°C/73°F, | 55% RH |
|------------|--------|
|------------|--------|

| Dry to Tape | 3 hours |
|--------------------|--|
| Dry to Sand | 4 hours |
| Force Cure | Aerodur HS 2121 can be forced cured. Please consult your AkzoNobel Aerospace Coatings representative for advice on your specific conditions. |
| Recoatable Minimum | 2 hours |
| Recoatable Maximum | 168 hours |

If a drying time of 168 hours is exceeded, condition the surface with grade P320 sanding paper or aluminum oxide non-woven abrasive pad. The above is not applicable when re-coated with intermediate coat Aerodur Sealer 42240.



Note

When using Aerodur Sealer 42240 after Aerodur HS 2121, the following overcoat times apply:

The recommended application window for best product performances is 20 – 25°C and 20 – 60% RH. Table below is provided as an indication for a product applied at the recommended DFT and may vary upon the exact temperature and humidity combination.

²Dynamic Air Pressure at the gun-inlet measured with an open trigger.

³General advice to meet the HVLP / next-generation spray gun requirements.



| Temperature \ RH | 20-40% | 41-60% | 61-80% |
|-----------------------|-----------------|-----------------|-----------------|
| 15 – 20°C / 59 – 68°F | 1:00 - 4:00 hrs | 1:00 - 4:00 hrs | 1:00 - 4:00 hrs |
| 21 – 25°C / 69 – 77°F | 1:00 - 3:00 hrs | 1:00 - 3:00 hrs | 1:00 - 3:00 hrs |
| 26 - 30°C / 78 - 86°F | 0:30 - 3:00 hrs | 0:30 - 2:30 hrs | 0:30 - 2:30 hrs |
| 31 – 35°C / 87 – 95°F | 0:30 - 3:00 hrs | 0:30 - 2:15 hrs | 0:30 - 1:15 hrs |



Theoretical Coverage

38 m² per liter mixed Aerodur HS 2121 CF Primer at 15 μm dry film thickness. 1557 ft² per US gallon mixed Aerodur HS 2121 CF Primer at 0.6 mil dry film thickness.



Dry Film Weight

2.0 g/m²/µm 0.0104 lbs/ft²/mil



Volatile Organic Compounds

Maximum 350 g/l Maximum 2.95 lbs/gal



Gloss

Not Applicable.



Color

Beige & Off-white



Flash Point

Aerodur HS 2121 CF Primer >21°C / 70°F

Hardener 6040 >21°C / 70°F
Activator A9026 <21°C / 70°F

Shelf life 5 - 35°C (41 - 95°F)

Aerodur HS 2121 CF Primer

24 months

Hardener 6040 Activator A9026 24 months 36 months

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.

Revision date: July 2023 (supersedes December 2021) - FOR PROFESSIONAL USE ONLY

MPORTANT 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