

Aerodur ARC

Technical Data Sheet

Product Group

Polyurethane Topcoat

Characteristics



Product
Information

Aerodur ARC is a 3-component polyurethane abrasion resistant coating.

- Minimal abrasion on areas highly exposed to wear and friction.
- Minimal dirt pick-up
- Impact and stone chip resistant (rough field operations)
- Rapid film build-up with standard air spray techniques

Components



Base material	Aerodur ARC
Hardener	Hardener S 66/22 R
Thinner	Thinner C 25/90 S

Specifications



Qualified Product
List

British Aerospace/ AVRO	BAEP 3536
Fokker	TH 5.724/1

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



Cleaning

- Observe the recoatability limits of the relevant primer/topcoat.
- Remove oil, grease and other contaminants prior to application of Aerodur ARC.
- Recondition aged primers or topcoats with e.g. Scotch-Brite® type A very fine till a uniform matt surface.
- Remove dust with e.g. tack rags prior to application of Aerodur ARC.

Instruction for Use



Mixing Ratio
(volume)

Aerodur ARC	100 parts
Hardener S 66/22 R	100 parts

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Reduce to spraying viscosity with:
Max. 25 parts Thinner C 25/90S

- Allow products to acclimatize to room temperature before use
- Stir or shake Aerodur ARC till all pigment is uniformly dispersed before adding hardener.
- Add Hardener S 66/22 R and stir the catalyzed mixture thoroughly.
- Add thinner and stir again till a homogeneous mixture.



Induction Time

15 – 30 minutes after mixing.



Initial Spraying
Viscosity
(21°C/70°F)

25 – 35 seconds ISO-Cup 4
13 – 17 seconds Gardner Signature Zahn-Cup #2.



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
(21°C/70°F)

4 hours



Dry Film
Thickness
(DFT)

125-150 µm
5-6 mils

Application Recommendations



Conditions

Temperature: 15 – 35°C
59 – 95°F
Relative Humidity: 25 – 80%

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Note

Aerodur ARC 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

Spray gun type	Nozzle orifice	Product flow	Dynamic air pressure at gun-inlet*
Air	1.4-1.8 mm	N/A	N/A
HVLP	1.4-1.8 mm	N/A	N/A



Number of Coats

Apply 2 cross coats with 1 till 2 hours flash off time in between.



Cleaning of Equipment

Solvent Cleaning C 28/15 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 air flow 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

Dust free	2 hours
Dry hard	6 hours
Forced cure	30 minutes flash off time, followed by 1 hour at 80°C or 2 hours at 60°C

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Theoretical
Coverage

6.4 m² per liter ready to apply at 125 µm dry film thickness.
257 ft² per US gallon ready to apply at 5 mils dry film thickness.



Dry Film Weight

1.4 g/m²/µm



Gloss (60°)

Maximum 30 GU.



Color

Grey and off-white



Flash-point

Aerodur ARC	>21°C / 70°F
Hardener S 66/22 R	>21°C / 70°F
Thinner C 25/90 S	<21°C / 70°F



Storage

Store the product dry and at a temperature between 5 and 35°C / 41 and 95°F per AkzoNobel Aerospace Coatings specification. Store in the original unopened containers. Periodical short time exposure (max. 48 hrs at a time) to higher temperatures (max. 40°C / 104°F) will not negatively influence the shelf life of the products .

Shelf life
5 - 35°C
(41 - 95°F)

Aerodur ARC	12 months
Hardener S 66/22 R	24 months
Thinner C 25/90 S	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.

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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.

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