Aerowave 2003
Technical Data Sheet

Product Group

Epoxy Primers.

Characteristics

Product Information

Aerowave 2003 is a chrome free, water-based, 2-component, corrosion inhibiting amine cured epoxy primer.

- Water based technology
- Chrome free
- Compatible with all products out of the Aerowave Series
- Designed for optimal mixing properties for both manual and plural mixing application.
- Corrosion inhibiting
- Low VOC emission
- Low dry-film-weight (DFW); reduce operational costs
- Resistance to aircraft hydraulic fluids and chemicals

Aerowave 2003 is a product part of the Aerowave Series which utilizes the latest water based technology and sets the standard for minimum process times, reduced process cycle costs and environmental care.

Components

Base material	Aerowave 2003
Curing Solution	Curing Solution 6005

Specifications

Qualified Product List

AgustaWestland	AWMS 28-002 WB CF Primer Ty. 1, Cl. 1, Gr. A

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.

AkzoNobel Aerospace Coatings
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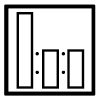
Surface Conditions

Cleaning

- Prime chemical conversion coatings and anodized parts in a fresh condition according the OEM guideline.
- Clean aged primer or finish and activate the substrate with e.g. Scotch-Brite® type A very fine to a uniform matt surface.
  Remove dust with e.g. tack rags prior to application of the primer.

Instruction for Use



Mixing Ratio (volume)

	Volume (v/v)	Weight (w/w) **(<1L)**
Aerowave 2003	3 parts	100 parts
Curing Solution 6005	1 part	28 parts

- When mixing <1L dose by weight.
- Allow products to acclimatize to room temperature before use.
- Homogenize Aerowave 2003 till all pigment is uniformly dispersed before adding the hardener
- Add Curing Solution 6005 and stir the catalyzed mixture thoroughly for at least 60 seconds.
- Automated dispensing units in combination with plural mixing devises can be applied for Aerowave 2003..

Induction Time

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

Initial Spraying Viscosity (21ºC/70ºF)

35–90 seconds ISO Cup #4
17-41 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.

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Pot life (21ºC/70ºF)	4 hours
Dry Film Thickness (DFT)	15-25 µm 0.6-1.0 mil
Note	The end of Pot Life is not visible by means of viscosity increase. Respect described Pot Life. Pot Life relates to temperature.

Application Recommendations

Conditions	Temperature:	15 – 35°C 59 – 95°F
	Relative Humidity:	25 – 80%
Note	Aerowave 2003 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*
Conventional	1.2-1.6 mm	N/A	N/A
HVLP/ next generation	1.2-1.6 mm	N/A	N/A
Air atomizing – electrostatic*	1.2-1.6 mm	N/A	N/A

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Airless/Air Assist	009 - .013 inch, angle 40º – 60º	N/A	N/A

Note

*) Use Electrostatic spray equipment designed for application of water based products.
To avoid contamination of water based – solvent based coating products it is advised to use dedicated water- / solvent-based spray equipment. For application of water based products use non corrosive spray equipment (e.g. stainless steel).

Number of Coats

Spray-apply a homogeneous, wet and closed coat.

Cleaning of Equipment

Clean the equipment with water directly after use. If necessary, semi-cured material remaining on the equipment can be cleaned with 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 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

	21ºC/70ºF -55%	60ºC/140ºF*	80ºC/176ºF*
Surface dry	1 – 2 hours	20 min.	10 min.
Dry to handle	4 hours	N.A.	N.A
Chemical resistant	72 hours	45 min.	30 min.

*) Substrate surface temperature
When forced cured; allow the paint a 5 minutes ambient flash-off time with sufficient air movement before entering the oven in order to obtain the best results.

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Recoat minimum*	When surface dry
Recoat maximum*	168 hours. If a drying time of 168 is exceeded recondition the surface with e.g. Scotch-Brite® type A very fine.

*) In combination with Aerowave Series products. In combination with solvent based products the minimum recoat time is 8 hours and the maximal recoat time is 48 hours without reconditioning

Note	Curing of waterborne products depends on temperature, relative humidity and air flow. Increased temperatures, low RH and efficient airflow can decrease the drying times significantly.
Theoretical Coverage	30 m^2 per liter ready to apply at 15 µm dry film thickness. 1203 ft^2 per US gallon ready to apply at 0.60 mil dry film thickness. .
Dry Film Weight	1.5 $g/m^2/\mu m$ 0.0078 $lbs/ft^2/mil$
Volatile Organic Compounds	≤ 120 g/L (1.0 lbs/gal) product ready to apply ≤ 250 g/L (2.1 lbs/gal) exempt water according to ASTM D-3960
Gloss (60º)	Maximum 20 GU.
Color	Light brown / grey.

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Flash-point	Aerowave 2003	>21ºC / 70ºF
	Curing Solution 6005	>21ºC / 70ºF

Storage

Store the product dry and at a temperature between 5 and 25ºC / 41 and 77ºF 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. 40ºC / 104ºF) will not negatively influence the shelf life of the products .

Shelf life	Aerowave 2003	12 months
5 - 25°C	Curing Solution 6005	12 months
(41 - 77°F)		

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 2022 (supersedes November 2015) - FOR PROFESSIONAL USE ONLY

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