

## Aviox Finish 77702

### Technical Data Sheet

#### Product Group

#### Polyurethane Top Coat

#### Characteristics

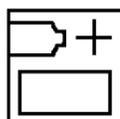


Product Information

Aviox Finish 77702 is a 3-component, low VOC (High Solids), isocyanate cured polyurethane single-stage high gloss and durable topcoat for exterior use. Aviox Finish 77702 utilizes the latest high-solid technology and sets the standard for minimum process times and reduced process cycle costs. The main product features are:

- Extended durability / UV resistance.
- Resistance to aircraft hydraulic fluids and chemicals.
- Wide application window due to various activators.
- Easy to repair by using Spot Repair Activator SRA9009.

#### Components



|                 |                    |
|-----------------|--------------------|
| Base            | Aviox Finish 77702 |
| Curing Solution | Hardener 90150     |
| Activator       | Activator 99322    |
| Activator       | Activator 99321    |
| Activator       | Activator 99341    |
| Activator       | Activator 99330    |

#### Specifications



Qualified Product List

|                     |                |
|---------------------|----------------|
| Airbus              | AIMS 04-04-025 |
| Airbus              | AIMS 04-04-031 |
| Airbus              | AIMS 04-04-032 |
| Embraer             | MEP 10-069     |
| UKMinistryofDefense | BS2X34 TY 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](http://aerospace.akzonobel.com/products).

#### Surface Conditions

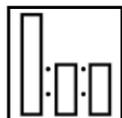


Cleaning

- Aviox Finish 77702 is compatible with the most commonly used primers.
- Observe the recoat times of the relevant primer.
- Apply Aviox Finish 77702 preferably on freshly applied primer. Remove oil, grease and other contamination prior to application.
- Recondition aged primers or topcoats with aluminum oxide non-woven abrasive material, type very fine, or stearate-free sanding paper, grade P320 to a uniform matt surface.
- Remove dust with e.g. tack rags just prior to application of Aviox Finish 77702.

## Aviox Finish 77702

### Instruction for Use



Mixing Ratio

|                    | Volume  |
|--------------------|---------|
| Aviox Finish 77702 | 2 parts |
| Hardener 90150     | 1 part  |
| Activator*         | 1 part  |

\* Activator options: Activator 99322, Activator 99321, Activator 99341, Activator 99330

- Allow products to acclimatize to room temperature before use.
- Stir or shake Aviox Finish 77702 until all pigment is uniformly dispersed before adding the activator. Always check with a ruler by scraping on the bottom of the opened can to determine if pigment sediment is still present.
- Add Hardener 90150 and stir the mixture thoroughly for a minimum of 60 seconds.
- Add the Activator suitable for the application area and the conditions mentioned below and stir the mixture thoroughly for a minimum of 60 seconds.

#### Activator Usage:

Activator 99341 - (Whole wide-body fuselage or single-aisle fuselage at warm conditions)

Activator 99321 - (Single aisle fuselage at normal conditions)

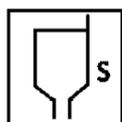
Activator 99322 - (Single aisle fuselage at cold conditions)

Activator 99330 - (Decoration markings, small surface areas or repairs)



Induction Time

Not applicable. The product is ready for use immediately after mixing.



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

21 – 30 seconds ISO Cup #4 for all colors  
11 – 16 seconds Gardner Signature Zahn Cup #2 for all colors



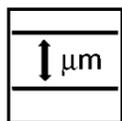
Note

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)

|                 |                                     |
|-----------------|-------------------------------------|
| Activator 99341 | 2 hours                             |
| Activator 99321 | 2 hours                             |
| Activator 99322 | 2 hours (for white and grey colors) |
| Activator 99322 | 1½ hours (other colors)             |
| Activator 99330 | 1 hour                              |



Dry Film Thickness  
(DFT)

Depending on the color to apply  
50 – 130 μm  
2.0 – 5.2 mils



Note

The application and mixing characteristics of High Solid products differ from conventional products. Mix base and hardener for at least 2 minutes thoroughly. The high solid content causes a rapid film build-up.

## Aviox Finish 77702

### Application Recommendations



Conditions

Temperature: 15 – 35 °C  
59 – 95 °F

Relative Humidity: 35 – 75 %



Note

Aviox Finish 77702 topcoat may be applied in conditions outside of the limits shown above. Care must be exercised to ensure a satisfactory result. Please contact your local AkzoNobel Aerospace Coatings representative to determine the proper application techniques and choice of activators 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 – 1.5mm                      | 280 – 300 mL/min <sup>1</sup>              | 4 – 4.5 bar / 58 – 65 psi <sup>2</sup> |
| HVLP / Next Generation             | N/A            | N/A            | 1.2 – 1.5mm                      | 280 – 300 mL/min <sup>1</sup>              | 2 – 2.5 bar / 29 – 36 psi <sup>3</sup> |
| Air Atomizing (electrostatic)      | N/A            | N/A            | 1.2 – 1.5 mm                     | 280 – 300 mL/min                           | 4 – 4.5 bar / 58 – 65 psi <sup>2</sup> |
| Pressure Atomizing (electrostatic) | N/A            | N/A            | 0.009 inch/60°<br>0.013 inch/60° | 65 – 75 bar/1.02 kpsi-25, 35 bar/0.43 kpsi | 4 – 4.5 bar / 58 – 65 psi <sup>2</sup> |

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

<sup>2</sup> Dynamic Air Pressure at the gun-inlet measured with an open trigger.

<sup>3</sup> General advice to meet the HVLP / next-generation spray gun requirements, please validate with your local authorities.



Number of Coats

Observe the recoat limits of the relevant primer.

Apply a first full wet coat followed after the recommended flash-off time by another full wet coat. When industrial hiding is not achieved after the second layer, an extra layer may be necessary.

Respect the flash-off time depending on the Activator used:

|                 |                  |
|-----------------|------------------|
| Activator 99341 | 75 – 120 minutes |
| Activator 99321 | 60 – 105 minutes |
| Activator 99322 | 45 – 75 minutes  |
| Activator 99330 | 30 – 45 minutes  |

The flash-off times between the coats are influenced by temperature, relative humidity and air movement. You can check if the coat is ready to repaint by gently pressing your finger in the fresh paint. If it is still tacky, but does not leave a mark on your finger, the second coat can be applied.



Note

When bright transparent colors (e.g. bright orange, yellow) are applied, it is advisable to first apply Aviox Finish 77702 foundation color in an off-white color (e.g. M8001) before application of the final bright color. This to reduce the number of coats necessary for industrial hiding.



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.

## Aviox Finish 77702

### Physical Properties



Drying Times

**23°C/73°F, 55% RH**

|             |  |
|-------------|--|
| Dry to Dust | 2 – 3 hours  |
| Dry to Sand | When dry to tape   |
| Dry to Tape | Activator 99321 10 – 12 hours<br>Activator 99322 7 – 9 hours<br>Activator 99330 3 – 5 hours<br>Activator 99341 14 – 17 hours |

Recoatable Minimum:  
Aviox Finish 77702 is recoatable within 48 hours.

Recoatable Maximum:  
If a drying time of 48 hours is exceeded, recondition with aluminum-oxide-based non-woven abrasive material, type very fine, or stearate-free sanding paper, grade P320, to a uniform matt surface. Ensure the surface is free of contamination by applying the appropriate cleaning steps.

Force Cure:  
Aviox Finish 77702 can be forced cured. Please consult your AkzoNobel Aerospace Coating representative for advise on your specific conditions. See dry-to-tape times.



Theoretical Coverage

10 m<sup>2</sup> per liter ready to apply material at 50 µm dry film thickness (white).  
425 ft<sup>2</sup> per US gallon ready to apply material at 2 mils dry film thickness.



Dry Film Weight

1.4 g/m<sup>2</sup>/µm for white and off-white colors. Other colors are on request.  
0.0073 lbs/ft<sup>2</sup>/mil for white and off-white colors. Other colors are on request.



Volatile Organic Compounds

Maximum 420 g/l  
Maximum 3.5 lbs/gal



Gloss (60°)

Minimum 90 GU



Color

Various solid colors. For effect colors please refer to the technical datasheet for our Aviox Advanced Mica Series.



Flash Point

|                    |             |
|--------------------|-------------|
| Aviox Finish 77702 | <21°C /70°F |
| Hardener 90150     | >21°C /70°F |
| Activator 99322    | <21°C /70°F |
| Activator 99321    | <21°C /70°F |
| Activator 99341    | <21°C /70°F |
| Activator 99330    | <21°C /70°F |

## Aviox Finish 77702



### 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. Storage temperature and shelf life may vary per OEM specification requirements. Refer to the container label for specific storage life information.

Shelf life 5 - 35°C (41 - 95°F)

|                    |           |
|--------------------|-----------|
| Aviox Finish 77702 | 24 months |
| Hardener 90150     | 24 months |
| Activator 99322    | 36 months |
| Activator 99321    | 36 months |
| Activator 99341    | 36 months |
| Activator 99330    | 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: October 2023 (supersedes April 2023 ) - 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