

# Alumigrip 4400 Base Coat

## Technical Data Sheet

### Product Group

### Basecoat

### Characteristics



Product Information

Alumigrip 4400 Basecoat is a 3-component, low VOC (high solids), durable, polyurethane base coat, formulated to exceed the performance and appearance requirements of the General Aviation (GA) industry. The Alumigrip 4400 Basecoat should be used with Alumigrip 4450 Clearcoat as part of a base coat / clear coat system.

- Designed to meet the rigorous requirements of the MIL-PRF-85285 specification
- Base coat / clear coat system helps reduce cycle time
- Low VOC; high solids technology
- Resistant to military and commercial aircraft fluids
- Solvent resistant

### Components



Base	Alumigrip 4400 Solid (4400GXXXX) or Effect (4400EXXXX)
Curing Solution	Curing Solution CS4904
Activator	Activator A4957
Activator	Activator A4956
Activator	Activator A4965
Activator	Activator A4967

### Specifications



Qualified Product List

AkzoNobel	Certification
Cessna	CMFS038
Embraer	MEP-10-125 TY I
Gulfstream Aerospace	GMS 5008
Piper Aircraft Inc	PMS-F1010

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



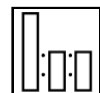
Surface Preparation/  
Cleaning

Surface pretreatment is an essential part of the painting process. Alumigrip 4400 Base Coat is compatible with most commonly used AkzoNobel Aerospace Coating primers; however, we advise using the following primers/surfacers:

- Alumigrip 10P8-11
  - Alumigrip 10P30-8
  - Alumigrip 4001
  - Aerodur 2111
  - Aerodur HS 2121
- Observe the recoat times of the relevant primer.
  - Apply Alumigrip 4400 Basecoat on clean primer. Remove oil, grease and other contamination prior to application.
  - Recondition aged primers or topcoats with grade P320 sandpaper or an aluminum oxide nonwoven abrasive pad to a uniform matt surface.
  - Remove dust with clean tack rags just prior to application of Alumigrip 4400 Basecoat.

# Alumigrip 4400 Base Coat

## Instruction for Use



Spray Application (Mix Ratio)

	Volume
Alumigrip 4400 Solid (4400GXXXX) or Effect (4400EXXXX)	2 parts
Curing Solution CS4904	1 part
Activator*	1 part

\* Activator options: Activator A4957, Activator A4956, Activator A4965, Activator A4967

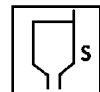
Alumigrip 4400 Solid Color Coat (4400GXXXXX)  
 Alumigrip 4400 Effect Color Coat (4400E82XXX) Mica, 2 stage effect  
 (4400E83XXX) Mica, 3 stage effect  
 (4400E99XXX) Aluminum, 2 and 3 stage

- Allow products to acclimatize to room temperature before use.
- Stir or shake Alumigrip 4400 Base Coat thoroughly until the product is uniformly homogenized before adding the curing solution.
- Add the Curing Solution CS4904 and stir the catalyzed mixture thoroughly.
- Add the Activator A4956, A4957, A4965, or the A4967 and stir the activated mixture again thoroughly.
- Product SRA-9009 is available to facilitate coating repairs by lowering the coating surface tension and thinning the paint for finer atomization. Ask your Technical Service representative for special instructions on using SRA-9009.



Induction Time

10 minutes



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

16 – 25 seconds Zahn Cup #2 Signature series  
 33 – 33 seconds ISO Cup #4



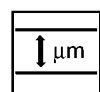
Note

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)

A4956 and A4965: 2 hours  
 A4957 and A4967: 2.5 hours



Dry Film Thickness (DFT)

25.0 – 37.5 μm  
 Gloss: 1.0 – 1.5 mils  
 Effect :1.0 – 1.5 mils



Note

Some colors with low opacity may need a layer thickness of up to 125 μm / 5 mils.

# Alumigrip 4400 Base Coat

## Application Recommendations



Conditions

Temperature: 15-35°C / 59-95°F  
Relative Humidity: 35 - 75%

Activator Guidelines:

A4956 Standard Activator  
65°F-85°F / 18°C-29°C, 15-80% RH  
Flash Time - 15-45 minutes

A4957 Warm, Humid Activator  
>78°F / >27°C, >70% RH  
Flash Time - 15-45 minutes

A4965 Fast Stripe - Spot Repair Activator  
50°F-80°F / 10°C-27°C, 15-65% RH  
Flash Time - 5-20 minutes

A4967 Cool Weather Activator  
60°F-85°F / 16°C-30°C, 15-85% RH  
Flash Time - 5-20 minutes



Note

Alumigrip 4400 Basecoat 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 – 1.4 mm	N/A	3-5 bar / 43-73 psi
HVLP / Next Generation	N/A	N/A	1.2 – 1.4 mm	N/A	2-2.5 bar / 29-36 psi**
Air Atomizing (electrostatic)	N/A	N/A	1.2 – 1.5 mm	250-300 ml/min	4-5 bar / 58-73 psi
Pressure Atomizing (electrostatic)	N/A	N/A	0.009-0.013 inch / 60°	N/A	N/A

\*Measured with an open trigger.

\*\*General advice to meet the HVLP / next generation spray gun requirements. Please validate with your local authorities.



Number of Coats

Two Stage Colors:

- Alumigrip 4400 Solid Color Coat (4400GXXXXX)  
- Alumigrip 4400 Effect Color Coat (4400E82XXX) and (4400E99XXX)

Apply 2 even wet coats with recommended flash time (depending on the activator chosen) in between coats or one cross coat until full hiding is achieved.

Three Stage Colors:

- Alumigrip 4400 Effect Color Coat (4400E83XXX)

Apply a single uniform wet coat of Alumigrip 4400 Base Coat Effect, with recommended flash time in between coats depending on the activator chosen, followed by a cross coat. The total cross coats should achieve the desired uniform effect.

(If applicable, apply a foundation color in 2 even wet coats with recommended flash time in between coats or one cross coat until full hiding is achieved as mentioned above before the effect coating is applied).



Note

Flash time refers to the elapsed time between the start of the first coat application and the start of the second coat application. Paint should have very little transfer when touched to indicate the paint is ready for application of the next coat.



Cleaning of Equipment

TR-19 or MEK.

# Alumigrip 4400 Base Coat



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 in order to identify the best equipment settings to be used in optimizing the performance and appearance of the coating.

## Physical Properties



Drying Times

	25°C/77°F, 55% RH, Activator A4956	25°C/77°F, 55% RH, Activator A4957	25°C/77°F, 55% RH, Activator A4965	25°C/77°F, 55% RH, Activator A4967
Dry to Tape	3.5 - 5.5 hrs	4.0 - 6.0 hrs	0.75 - 2.0 hrs	1.0 - 2.0 hrs
Dry to Touch	2.0 - 3.0 hrs	3.0 - 4.0 hrs	0.50 - 2.0 hrs	1.0 - 2.0 hrs
Dry to Overcoat	2.0 - 3.0 hrs	3.0 - 4.0 hrs	0.5 - 2.0 hrs	1.0 - 2.0 hrs
Full Cure	7 days	7 days	7 days	7 days

Activator:  
A4956: Standard  
A4957: Warm, Humid  
A4965: Fast Stripe – Spot Repair  
A4967: Cool Weather

Parts and components - A4965 or A4967  
Full Body (Assembled) - A4956, A4957, or A4967  
Repair - A4965, do not heat cure  
Stripe - A4965 or A4967



Note

Alumigrip 4400 over different color Alumigrip 4400

Recoat minimum 2 hours  
Recoat maximum 7 days

Alumigrip 4450 over Alumigrip 4400

Recoat minimum 2 hours  
Recoat maximum 7 days

Dry times and recoat times will vary depending on combinations of temperature, humidity and airflow.

After 7 days, recondition the aged base coat to a uniform matt surface using grade P320 sandpaper or an aluminum oxide nonwoven abrasive pad. If excess paint is removed, we recommend reapplication of the initial Alumigrip 4400 Base Coat applied to establish a uniform coat and full hide.



Theoretical Coverage

Solid Colors:  
19.09 m<sup>2</sup> per liter ready to apply at 25.4 µm dry film thickness.  
778 ft<sup>2</sup> per US gallon ready to apply at 1.0 mil dry film thickness.

Effect Colors:  
19.51 m<sup>2</sup> per liter ready to apply at 25.4 µm dry film thickness.  
795 ft<sup>2</sup> per US gallon ready to apply at 1.0 mil dry film thickness.



Dry Film Weight

Solid Colors	Effect colors
39.7 g/m <sup>2</sup> /25.4 µm	33.6 g/m <sup>2</sup> /25.4 µm
0.0081 lbs/ft <sup>2</sup> /1.0 mil	0.0069 lbs/ft <sup>2</sup> /1.0 mil






Volatile Organic Compounds

Solid Colors  
Max 422.7 g/l  
Max 3.5 lbs/gal

Effect Colors

# Alumigrip 4400 Base Coat

	Max 420 g/l Max 3.5 lbs/gal	
 Gloss (60°)	Maximum 85 GU	
 Color	Various	
 Flash Point	Alumigrip 4400 Solid (4400GXXXX) or Effect (4400EXXXX)	Refer to MSDS.
	Curing Solution CS4904	7°C/44°F
	Activator A4957	44°F / 7°C
	Activator A4956	44°F / 7°C
	Activator A4965	93.2°F / 34°C
	Activator A4967	93.2°F / 34°C
Shelf life 5 - 38°C (41 - 100°F)	Alumigrip 4400 Solid (4400GXXXX) or Effect (4400EXXXX)	24 months
	Curing Solution CS4904	24 months
	Activator A4957	24 months
	Activator A4956	24 months
	Activator A4965	24 months
	Activator A4967	24 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: May 2024 (supersedes April 2024) - 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