



Alumigrip® Clear Coat Application Procedure

Characteristics



Product
Information

- Alumigrip® Clear Coat is a 3-component, high solids, durable, Acrylic Urethane clear coat that provides exceptional gloss and DOI. Formulated to exceed the performance and appearance requirements of the general aviation (GA) industry. The Alumigrip® Clear Coat should be used with Alumigrip® Base Coat as part of a base coat / clear coat system.
- Designed to meet the rigorous requirements of the MIL-PRF-85285 specification.
- Passes High Pressure Water Jet simulated erosion test.
- Base coat / clear coat system helps reduce cycle time.
- Low VOC; high solids technology.
- Buffable
- Extended durability / UV resistance
- Resistant to military and commercial aircraft fluids.

Components



Base
Curing Solution

Activator Options

Alumigrip® Clear Coat
Curing solution 4906

Activator 4959 Standard Activator
Activator 4960 Cool Weather Activator
Activator 4961 Warm Humid Temp. Activator

See application recommendations, page 2.

Surface Conditions



Cleaning

- Surface pretreatment is an essential part of the painting process.
- Observe the recoat times of the Alumigrip® Base Coat.
- Alumigrip® Clear Coat should be applied 2 hours to 24 hours after Alumigrip® Base Coat application.
- If you exceed 24 hours after Alumigrip® Base Coat application then wiping with isopropyl alcohol is advised (the Alumigrip® Clear Coat can be applied up to seven days after Alumigrip® Base Coat application without reactivation of the base coat surface).
- Remove dust with tack rags just prior to Alumigrip® Clear Coat application.

Mixing Instructions



Mixing Ratio
(volume)

1 part	Alumigrip® Clear Coat
1 part	Curing solution 4906
.25 parts	Activator 4959, 4960, or 4961



Mixing Instructions *Continued*

1. Store material at room temperature for a minimum of 24 hours prior to mixing.
2. Prior to mixing put the base portion on a shaker and agitate for five minutes before adding the curing solution.
3. The Alumigrip® Clear Coat base component should be uniform and free of lumps, skins or hard settling.
4. The Curing Solution 4906 should be clear. Do not use if the curing solution has gelled, is cloudy or milky. **Do not use** if the unopened can shows signs of swelling since this indicates moisture contamination. Add the appropriate Alumigrip® curing solution and mix thoroughly.
5. Add the appropriate Activator 4959, 4960, or 4961 activator and stir mixture thoroughly again.
6. Viscosity: 16-20 seconds, #2 Signature Zahn cup.



Induction Time

10 minute induction time is suggested before application.



Pot Life
(25°C/77°F)

2.0 - 2.5 hours.

Application Recommendations



Conditions

Activator Options:

Activator:	<u>4959</u>	<u>4960</u>	<u>4961</u>
Temperature:	21 – 27°C 70 – 88°F	<21°C <70°F	>27°C >80°F
Relative Humidity:	45 – 55%	40-80%	>65%



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

Type	Tip Size	Gun Air Pres.	Pot Air Pres.	Other
Conventional	.052-.070 in	60-70 psi	5-20 psi	Low transfer efficiency
HVLP	1.2-1.4 mm	8-25 psi	Varies w/pot size	Iwata, Sata, Binks Mach1
LP Electrostatic	1.2-1.5 mm	35-45 psi	12-100 psi	PRO3500, 4500SC
Air Electrostatic	009-.013 in	65-75 psi	850-1000 psi	PRO4000AA, Ransburg (tip 1.2-1.5 mm)
Air Electrostatic	.009-.013 in	60-75 psi	1800-2500 psi	PRO4500AA



Application

1. Apply a single uniform wet coat (1.0 mils wet) of Alumigrip® Clear Coat.
2. Flash 5 minutes followed by a box coat then flash 15 minutes.
3. Repeat this process with an increased wet film of two mils wet per pass.
4. The total box coats should achieve the required dry layer thickness of 50.0 – 62.5µm (2.0 – 2.5 mils).



Cleaning of Equipment

TR-19 or MEK for conventional spray equipment.

Physical Properties



Drying Times
(25 +/- 2°C / 77
+/- 2°F, 55 +/- 5%
RH)

Dry to dust free	1 hour
Dry to tape	8 – 10 hours
Full cure	7 days
Dry to Fly	18 – 24 hours



Note

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



Application Over Decals

1. Apply Alumigrip® Base Coat.
2. After four hours minimum, apply decal. Work decal as required (smooth, remove trapped air, etc.)
3. Apply Alumigrip® Clear Coat to a uniform dry film thickness of 2.0-2.5 mils.



Touch-Up and Repair

1. Mask off area to be repaired.
2. Lightly sand or Scotch Brite® abrade, then tack off.
3. Re-apply Alumigrip® Clear Coat.
4. Alumigrip® Clear Coat may be buffed after 24 hours 25°C/ 77°F or 8-12 hours at 48°C/120°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 MSDSs are available on request.

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