

Optidur 9000

High Gloss Polyester Clear Top Coat

Technical Data Sheet

Product Group

Polyester Clear Top Coat

Characteristics



Product
Information

This polyester top coat is designed for the finishing of interior wood substrates. This top coat is used as part of the high performance Optidur coating system. This top coat is applied over an Optidur tie coat and/or Optidur build coat/sealer.

Note: Please contact your AkzoNobel Aerospace representative for further information on choosing the appropriate product system components (stack-up) for your application.

Components



Base, Curing
Solution,
Accelerator

Base:	900-001A
Curing Solution:	900-001B
Activator:	900-001C
Fire Retardant:	FR-1100
Pot Life Extender (Optional)	150-002PLE
Flow Additive (Optional)	150-001FA



Note

Note: The mixing order is very important. Please refer to the mixing instructions in the section below titled "Instructions for Use"

Note also that the Curing Solution 900-001B should never be placed in direct contact with 900-001C Activator. It is essential that 900-001B and 900-001C be stored in different locations **to avoid a potentially explosive reaction.**

Specifications



Qualified
Product List

ANAC

For most recent up-date or missing specifications please check the qualified product list (QPL) on www.aerospace.akzonobel.com

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Surface Conditions



Cleaning



- Surface pretreatment is an essential part of the painting process
- Prepare surface by cleaning and sanding smooth, and excess dust must be removed. Then sand with 320 grit paper before application of Optidur 9000 Top Coat.

Note:

- Apply the Optidur 7100 tie coat first if the veneer is stained or unstained and if Optidur 8200 build coat/sealer is used
- Apply the Optidur 7100 tie coat first if the veneer is stained, and when using the Optidur 8000 build coat/sealer (roll coater applied).

Instruction for Use



Mixing Ratio
(volume)

100 part(s)	Base	900-001A
1.5 - 2.0 part(s)	Curing Solution	900-001B
1.0 - 1.5 part(s)	Activator	900-001C
5.0 part(s)	Fire Retardant	FR-1100
6 parts max by volume	Flow Additive (Optional)	150-001FA
1.8 parts max by volume	Pot Life Extender (Optional)	150-002PLE



Note

Note: The mixing order is very important.

First, add the FR-1100 to the **base** 900-001A. If using the pot life extender and/or flow additive, add these to the **base component** as well.

Second, after the additives are combined into the base, then add the 900-001B Curing Solution into the Base mixture and mix well (hand stirred only). Then, finally the 900-001C Activator is added to the mixture and mixed thoroughly by hand. Never add the curing solution and activator simultaneously.

- The optional flow additive may help reduce orange peel depending on user spraying capability.
- The optional pot life extender is recommended for ambient temperatures at 95 F or above in order to get a pot life of 20 minutes.

Note also that the Curing Solution 900-001B should never be placed in direct contact with 900-001C Activator. It is essential that 900-001B and 900-001C be stored in different locations **to avoid a potentially explosive reaction.**

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Induction Time

None



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

38 - 42 seconds #2 Zahn at 25°C



Note

Viscosity measurements are provided as guidelines only and are not to be used as quality control parameters.



Pot life
(25°C/77°F)

15 – 20 minutes



Dry Film
Thickness
(DFT)

200 – 385 micron (µm)
8.0 – 15.0 mils

Application Recommendations



Conditions

Temperature:
13 – 35°C
55 – 95°F



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.

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Equipment

1.6 – 1.8 tip size
27-32 PSI at the spray gun

[HVLP and Compliant guns]



Number of
Coats

Spray 2-4 uniform coats, with each coat being sprayed as a cross coat achieving 5 mils total per coat. Wait 15 minutes between coats.

Note: After application is completed, flash off for 1 hour before baking. Bake at 100 degrees F for 8-12 hours.



Cleaning of
Equipment

Flush equipment immediately after use with Acetone only.

Physical Properties



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

Full cure
Dry to topcoat
Dry hard

3 days
15 minutes
12 Hours



Theoretical
Coverage

172.1 m² per liter ready to apply at 25 µm dry film thickness
1548.8 ft² per US gallon ready to apply at 1.0 mil dry film thickness



Dry Film Weight

39.8 g/m²/25 micron
0.008 lbs/ft²/1.0 mil



Volatile Organic
Compounds

Max 6.7 g/l admixed
Max. 0.1 lb/gal

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Gloss (60°)

85 – 99 GU



Color

Amber



Flash-point

900-001A Base	32°C / 90°F
900-001B Curing Solution	100°C / 212°F
900-001C Activator	-3°C / 27°F
150-002PLE Pot Life Extender	-3°C / 27°F
150-001FA Flow Additive	-20°C / -4°F



Storage

Store the product dry and at a temperature between 5 - 38°C/40 - 100°F. per AkzoNobel Aerospace Coatings specification. Store in the original unopened containers. Storage temperature may vary per OEM specification requirements. Refer to container label for specific storage life information.



Note: We recommend keeping a pail containing water in the paint shop and use it to store any used cups containing catalyzed Optidur 9000 after gelling has begun. Doing so will reduce fire hazard and the risk of the cup fuming

Shelf life
5 - 38°C
(40 - 100°F)

900-001A	Base	6 months
900-001B	Curing Solution	12 months
900-001C	Activator	12 months
150-002PLE Pot Life Extender		12 months
150-001FA Flow Additive		12 months

per AkzoNobel Aerospace Coatings commercial specification. Shelf life may vary due to OEM specification requirements. Refer to container label for specific shelf life information.

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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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