

# Optidur 8300 UV High Gloss Sealer

## Technical Data Sheet

### Product Group

Cabin Coatings

### Characteristics



Product  
Information

Optidur 8300 UV High Gloss Sealer is a 1-component high quality, Ultraviolet Reactive coating (UV), used as a sealer and topcoat on all types of solid wood and veneer meant for interior use. Its special formulation provides excellent hold out for subsequent coating.

UV cured aliphatic polyurethane resins provide the basis for Optidur 8300 UV High Gloss Sealer. These resins chemically combine to form the backbone of the final coating. The material is specifically formulated to obtain premium performance with respect to hardness, durability, abrasion, scratch and chemical resistance. The Optidur 8300 UV High Gloss Sealer is designed to provide superior flexibility to a high build system. Optidur 8300 UV High Gloss Sealer can be buffed and polished to provide a high gloss and wet look appearance.

- Excellent adhesion on wood
- Good filling properties
- Excellent DOI
- Excellent scratch resistance
- Excellent resistance to dry heat and fluids
- Suited for spray application

Product is part of the Optidur Series which utilizes the latest resin technology and sets the standard for minimum process times, reduced process cycle costs and environmental care.

### Components



Base material	Optidur 8300 (803-001A)
Additive	FR-1100

### Specifications

Flammability	F.A.R. / J.A.R 25.853(a) App.F Pt. I(a)(1)(i) 60s*
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# Optidur 8300 UV High Gloss Sealer



Qualified Product  
List

\*Compliance is dependent on flame retardant and amount added. Please contact your local AkzoNobel Aerospace Coatings representative for more detailed information.

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

- Product is compatible with other products out of the Optidur Series.
- Optidur 8300 UV High Gloss Sealer is designed to be applied over properly cured and sanded Optidur 7001 Tie Coat and/or Optidur 6000 UV Sealer.
- Remove oil, grease and other contaminations carefully using an appropriate mild cleaning solvent like isopropyl alcohol.
- Remove dust with clean tack rags or equivalent prior to application of Optidur 8300.
- Optidur 8300 UV High Gloss Sealer may also be applied directly over uncured Optidur 6000 UV Filler.

## Instruction for Use



Mixing Ratio  
(volume)

	Volume (v/v)	Weight (w/w)
Optidur 8300 (803-001A)	100 parts	100 parts
FR-1100	5 - 10 parts	5 - 10 parts

- FR-1100 is an optional flame retardant that may be added depending on the type of substrate and flammability requirements.
- Allow products to acclimatize to room temperature before use.
- Stir or shake the Optidur 8300 base thoroughly to obtain a homogenized product.
- Add FR-1100 and stir the mixture thoroughly for at least 2 minutes.
- Mechanical mixing/stirring is preferred, or shake the mixture thoroughly on a paint shaker for 60 seconds.



Induction Time

Not applicable.



Pot life  
(25°C/77°F) –  
55% RH)

Not applicable.

## Optidur 8300 UV High Gloss Sealer



Dry Film  
Thickness  
(DFT)

50 – 300  $\mu\text{m}$   
2 – 12 mils



Note

Review SDS for proper Personal Protective Equipment (PPE).

### Application Recommendations



Conditions

Temperature: 15 - 35°C  
59 - 95°F  
Relative Humidity: 25 - 85%



Note

Optidur 8300 UV High Gloss Sealer 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  
Recommendation

HVLP / Next Generation, 1.4 – 1.8 mm tip size, air pressure\* - 2-2.5 bar / 29-36 psi\*\*

\*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

Apply a closed wet coat of 50 – 75  $\mu\text{m}$  (2 – 3 mils) wet film followed by 10-15 minutes flash-off time at ambient conditions. UV Cure with 400 – 600 millijoules (UVA) energy. Lightly sand cured coating using P400 sandpaper or an aluminum oxide nonwoven abrasive pad type very fine and clean the surface. If more coats are required to achieve desired build, apply subsequent coats with curing and sanding in between each coat up to 4 coats.

## Optidur 8300 UV High Gloss Sealer

Flash-off times will vary depending on combinations of temperature, humidity, airflow, and wet film thickness, so it is recommended to adhere to the application guidelines above.



### Cure Guidelines

- UV Cure with 400 – 600 millijoules (UVA) energy.
- Optidur 8300 UV High Gloss Sealer can be cured using most types of UV lamps.
- Check energy output prior to use.



### Cleaning of Equipment

Clean equipment with Solvent Cleaning C28/15 or Solvent Cleaning 98068. Clean equipment directly after use.



### 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



### Theoretical Coverage

19.6 m<sup>2</sup> per liter ready to apply at 25 µm dry film thickness  
800 ft<sup>2</sup> per US gallon ready to apply at 1 mil dry film thickness



### Dry Film Weight

27.4 g/m<sup>2</sup>/25 µm  
0.006 lbs/ft<sup>2</sup>/mil



### Volatile Organic Compounds

Maximum 420 g/l  
Maximum 3.5 lbs/gal

## Optidur 8300 UV High Gloss Sealer



Gloss (60°) Not Applicable



Color Clear



Flash-point Optidur 8300 (803-001A) -6 °C / 22 °F  
FR-1100 -9°C / 15.8°F



Storage Store the product dry and at a temperature between 5 and 21°C / 41 and 70°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 container label for specific storage life information.

Always Rotate Stock.

Shelf life	Optidur 8300 (803-001A)	12 months
5 - 21°C	FR-1100	12 months
(41 - 70°F) / 55%		
RH		

### 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: October 2023 (supersedes None)- 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.

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