

4002A21M

Aluminum Lipskin Coating

Technical Data Sheet

Product Group

High heat coating

Characteristics



Product
Information

This specialty coating is designed for use on the leading edges of aluminum alloy nose cowl inlets. It is formulated to resist erosion, aircraft fluids and the temperatures associated with de-icing equipment. This coating prevents pitting of the anodized surfaces typical of the construction of the nose cowl.

Components



Curing Solution
Thinner

Curing Solution: 0200T106
Optional Thinner: 66C20

Specifications



Qualified
Product List

Northrop Grumman	GP110YV
Goodrich	RPS 13.75
Rolls Royce (Omat)	07-148

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

Surface Conditions



Cleaning

- Surface pretreatment is an essential part of the painting process. Preferably apply coating within 16 hours of anodizing, or lightly abrade anodized surface with Type A, Very Fine, Scotch-Brite® pads, followed by solvent wipe.

Substrate

Alodine or chromic and sulphuric acid anodized surfaces

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Instruction for Use



Mixing Ratio
(volume)

4 parts
1 part

Base 4002A21M
Curing Solution 0200T106

Optional
Up to 1 part

66C20 or Toluene

- Stir or Shake until all pigment is uniformly dispersed before adding curing solution.
- Stir the catalyzed mixture thoroughly.



Induction Time

30 minutes



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

18 – 20 seconds Zahn-Cup #3



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)

8 hours



Dry Film
Thickness
(DFT)

25 – 38 microns (μm)
1.0 – 1.5 mils

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Application Recommendations



Conditions

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



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.



Equipment

Spray or brush



Number of
Coats

Two coats with 10 – 15 minutes flash off between coats



Cleaning of
Equipment

Use wash thinner

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Physical Properties



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

Dry to handle

8 hours at ambient **or**
30 minute minimum flash, then 30
minutes at 250°F (121°C)

Full cure

7 days **or**
30 minute minimum flash, then 24 hours
at 250°F (121°C)



Theoretical
Coverage

18.6 m² per liter ready to apply at 25 µm dry film thickness
756 ft² per US gallon ready to apply at 1 mil dry film thickness



Dry Film Weight

36.7 g/m² at 25.4 (µm)
0.0075 lbs/ft² at 1 mil



Volatile Organic
Compounds

Max 442 g/l , unreduced
Max 3.7 lb/gal

Solvent
Resistance

50 double rubs MEK and acetone (some color pickoff but film integrity
remains).

Heat Resistance

16 hours at 600°F (316°C) (slight color change allowed)

Impact
Resistance

40 in/lbs reverse, 40 in/lbs direct
Substrate: Alodine 1200 aluminum sulphuric acid anodized aluminum



Gloss (60°)

Low

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Color

Aluminized appearance



Flash-point

4002A21M
0200T106
66C20

<-4°C / 25°F
>26°C / 80°F
<-4°C / 25°F



Storage

Store the product dry and at a temperature between 5 and 38°C / 40 and 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.

Shelf life
5 - 38°C
(40 - 100°F)

12 months per AkzoNobel Aerospace Coatings commercial specification for 4002A21M and 0200T106. 24 months for 66C20. Shelf life may vary due to OEM specification requirements. Refer to container label for specific shelf life information.

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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