

# 68C3-1-A

## High Heat Resistant Insulative Coating

### Technical Data Sheet

#### Product Group

High heat coating

#### Characteristics



Product  
Information

- This trowelable coating is designed for use as a high temperature insulation for environments with continuous exposure to temperatures up to 600°F and as a fire protection barrier. It is ideally suited for adhesive bonded assemblies in high temperature areas where adhesive deterioration might otherwise occur.
- It is a trowelable material that cures at ambient temperatures, and may be applied at thicknesses of up to ½ inch or more. Normally a thickness of 1/16 to ¼ inch is adequate for thermal and fire protection. If thicker films are required, several applications will be necessary.

#### Components



Curing Solution  
Thinner

Curing Solution SC-100A  
Thinner SCR-100

#### Specifications



Qualified  
Product List

Boeing BMS 10-102 , Ty I, CI II, Gr 30 (BAC 5892, Ty II)

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

#### Surface Conditions



Cleaning

- Surface pretreatment is an essential part of the painting process.
- Follow the specification requirements for cleaning and pretreatment application.

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### Instruction for Use



Mixing Ratio  
(volume)

100 parts  
4.00 parts  
4.00 parts

Base 68C3-1-A  
Curing Solution SC-100A  
Thinner SCR-100

- This trowelable coating is supplied as a three-part kit. Normally, for repair of coating, only partial kits are mixed. Premix the curing solution into the thinner in order to reduce the hardener viscosity and aid in its dispersion into the base component.
- Thoroughly mix the base by hand using a stiff blade, paddle or spatula. Use of a paint shaker may not provide adequate mixing.



Induction Time

None



Pot life  
(25°C/77°F)

1 hour



Dry Film  
Thickness  
(DFT)

0.125 – 0.25 inch  
125 – 250 mil

### Application Recommendations



Conditions

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



Equipment

Apply by trowel

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Number of  
Coats

The material as mixed is ready for troweling.



Cleaning of  
Equipment

Use MEK for cleanup.

### Physical Properties



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

This insulative coating will cure to a 40 durometer hardness (Shore A) in 24 hours at 80°-90°F (27°-32°C). The cure may be accelerated by drying for 8-12 hours at 90°F (32°C) followed by 6 hours at 140°-160°F (60°-71°C). Other time/temperature combinations may be used.



Theoretical  
Coverage

31.8 m<sup>2</sup> per liter ready to apply at 25.4 μm dry film thickness  
1297 ft<sup>2</sup> per US gallon ready to apply at 1 mil dry film thickness (admixed,  
no loss).  
Generally coverage is higher due to air entrapped during application.



Dry Film Weight

0.46 g/m<sup>2</sup>/μm  
0.0024 lbs/ft<sup>2</sup>/mil



Volatile Organic  
Compounds

Max 156 g/l  
Max 1.3 lb/gal

Weight

4.3 lbs/gal




Percent solids by  
weight

70% admixed

Percent solids by  
volume

80% admixed

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Film hardness	45 (Shore A) minimum
Adhesion	38-40 psi (failure is cohesive)
Density	22-25 lbs/ft <sup>3</sup>
Fire protection	No burn through of 1/8 inch coating after 15 minutes exposure to 2000°F flame. Back side temperature is 750°F after 15 minute exposure.
Thermal conductivity	70°F = 0.6 BTU-in/hr/ft <sup>2</sup> /°F 500°F = 0.75 BTU-in/hr/ft <sup>2</sup> /°F Note: data generated on ½ inch thick specimens
 Color	Light red
 Flash-point	68C3-1-A - 6°C / 20°F SC-100A 121°C / 250°F SCR-100 - 6°C / 20°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)	6months 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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