

64C1-2-A

High Temperature Resistant Insulative Coating

Technical Data Sheet

Product Group

High temperature coating

Characteristics



Product
Information

64C1-2-A is formulated for use as a high temperature insulation coating for environments with continuous exposure to temperatures up to 600°F and as a fire protection barrier. The coating is ideally suited for adhesive bonded assemblies in high temperature areas where adhesive deterioration might otherwise occur. Since it is a sprayable material that cures at ambient temperatures, it may be applied to assemblies with complicated configurations at thicknesses of up to one inch or more. Normally a thickness 1/16 to 1/4" is adequate for thermal and fire protection. A trowelable grade for repair or potting requirements is also available (68C3-1A).

64C1-2-A, and the primer and topcoat, Dowsil™ PR-1200 Primer Clear, and RTV560, are the component coatings of the BMS 10-102 high temperature insulation paint system. All three components are formulated using high temperature resistant silicone resins. All application areas and equipment must be isolated from the areas and equipment used for alternative paint systems. The BMS 10-102 paint system is extremely contaminating to alternative paint systems.

Components



Curing Solution
Thinner

Curing Solution SC-100-A
Thinner SCR-100

Specifications



Qualified
Product List

Boeing BMS 10-102, Ty I, CI I, Gr 25

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

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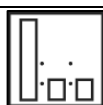
Surface Conditions



Cleaning

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

Instruction for Use



Mixing Ratio
(volume)

100.00 parts	Base 64C1-2-A
2.20 parts	Curing Solution SC-100-A
2.20 parts	Thinner SCR-100

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



Induction Time

None



Pot life
(25°C/77°F)

2 – 4 hours



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%

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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

Conventional pressure pots equipped with continuous agitation are suitable. Appropriate fluid tip, needle and air cap recommendations are available. Fluid hoses must be nylon or Teflon lined. *The equipment should be used exclusively for this coating to avoid contamination.*

For spray application of insulative coating materials:

Binks equipment:

1. Small areas - Binks 18-V spray gun with No. 66 fluid tip and air nozzle or equivalent.
2. Large areas - Binks 18-V spray gun with No. 64 fluid tip and air nozzle. Set pot pressure at 5-15 lbs (depending on fluid hose size and length) and nozzle air pressure at 35-45 psi. Pot and atomizing pressures should be set in combination so equipment is capable of depositing a coating thickness of 10-15 mils in one application. All spray application equipment must be pressure fed.

Devilbiss equipment:

1. Small areas - MBC 510 gun fluid tip AV-601-FX, fluid needle MBC-444-FX, air cap No. 704.
2. Large areas - MBC 510 gun, fluid tip AV-601E, fluid needle MBC-444E, air cap No. 704.

For application of topcoat with:

1. Brushes - use identical type brushes as specified for *Dowsil™ PR-1200 Primer Clear*. Caution: Brushes may be cleaned for reuse only for continued application of the RTV 560.

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2. Spray equipment - Pressure feed - Use same types of equipment as specified for small areas above.

3. Siphon feed - MBC 510 gun, No. 30 air cap, AV-601-EX fluid tip and MBC-496-EX fluid needle.



Number of
Coats

Apply the coating in a wet, continuous spray pattern with sufficient overlap to prevent dry spraying. Generally a dry film thickness of 15 to 20 mils may be achieved per coat.



Cleaning of
Equipment

Flush and clean with MEK

Physical Properties



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

The 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

22.9 m² per liter ready to apply at 25.4 µm dry film thickness
936 ft² per US gallon ready to apply at 1 mil dry film thickness (no loss).
Generally, coverage is higher due to air entrapped during application.



Dry Film Weight

0.45 g/m²/µm
0.0023 lbs/ft²/mil



Volatile Organic
Compounds

Max 320 g/l
Max 2.6 lb/gal

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Color

Pale brick red

Film hardness: 30 (Shore A) minimum

Adhesion: 25-40 psi (failure is cohesive)

Density: 19-21 lb/ft³ (304-336 kg/m³)

Fire protection: After 15 minutes exposure to 2000°F flame, 1/8" coating experiences no burn through and back side temperature is 750°F.

Thermal conductivity: 70°F = 0.50 BTU-inch/hour/ft²/°F

500°F = 0.64 BTU-inch/hour/ft²/°F

Admixed weight: 4.8 lbs/gal

Admixed percent solids: 45% by weight

Admixed percent solids: 58% by volume



Flash-point

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14°C / 15°F

SC-100-A

121°C / 250°F

SCR-100

-7°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)

6 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.

Safety Precautions

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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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