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, DC1200 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, Cl I, Gr 25

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

AkzoNobel Aerospace Coatings
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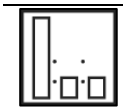
Surface Conditions

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

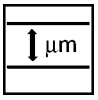
- Stir or Shake until all pigment is uniformly dispersed before adding curing solution.
- Stir the catalyzed mixture thoroughly.

Induction Time

None

Pot life (25ºC/77ºF)

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 DC-1200 primer.Caution: Brushes may be cleaned for reuse only for continued application of the RTV 560.
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.

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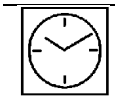
 Number of Coats	Apply the coating in a wet, continuous spray pattern with sufficient overlap to prevent dry spraying. Generally a dry film thickness of 15 to 20 mils may be achieved per coat.
 Cleaning of Equipment	Flush and clean with MEK

Physical Properties

 Drying Times (25 +/- 2ºC / 77 +/- 2ºF, 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 m^2 per liter ready to apply at 25.4 µm dry film thickness 936 ft^2 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 $g/m^2/\mu m$ 0.0023 $lbs/ft^2/mil$
 Volatile Organic Compounds	Max 320 g/l Max 2.6 lb/gal
 Color	Pale brick red

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Film hardness: 30 (Shore A) minimum
Adhesion: 25-40 psi (failure is cohesive)
Density: 19-21 lb/ft^3 (304-336 kg/m^3)
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

64C1-2-A	14°C / 15ºF
SC-100-A	121°C / 250ºF
SCR-100	-7°C / 20ºF

Storage

Store the product dry and at a temperature between 5 and 38ºC / 40 and 100ºF 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

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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