Technical Data Sheet Aerospace Coatings



Desothane® HS CA8000 Mica System

Product Description

Desothane® CA8000 Mica systems are based on current CA8000 technology and have been developed to provide airlines with greater flexibility and choice in selection of exterior livery systems.

- High Solids, low VOC
- Excellent durability
- Excellent flexibility
- Wide range of mica particle size and surface effects available

Components



Mix Ratio (by volume)

CA8000 (Base)
CA8000B (Activator)
CA8000C Series (Reducers)
2 parts
1 part
part

Specifications



CA8000 Mica is qualified to:

- AIMS 04-04-012
- AIMS 04-04-013
- AIMS 04-04-025
- AIMS 04-04-031
- AIMS 04-04-032
- AMS 3095
- BAMS 565-02
- BAMS 565-09
- BMS 10-60 T2
- BMS 10-72 T8
- BMS 10-125
- DHMS C4.04
- MM 0114
- MSRR 1006

CA8000 Mica meets the performance requirements of:

- AIMS 04-04-014
- Mil-PRF-85285

Product Compatibility

CA8000 Mica is compatible with the following primer specifications:

- AIMS 04-04-001
- AIMS 04-04-004
- ABP 4-1123
- ABP 4-2127
- ABP 5-1351

- AMS 3095
- BAMS 565-008
- BMS 10-79
- BS2X33A+B

Note: PPG Aerospace recommends you check the most recent specification QPLs for updated information.

CA8000 Mica System

Surface Preparation and Pretreatment



Ensure surface is clean, dry and intact using a high performance solvent cleaner - DeSoto[®] CN20 or Desoclean[™] 45 solvent cleaners are recommended. Observe recommended overcoating windows.

Instructions for Use



Base should be manually stirred only. Ensure all components are adequately dispersed. Add base to activator and stir thoroughly then add reducer.

DO NOT ADJUST VISCOSITY.

DO NOT FILTER THE MICA VARNISH.

Note: All products and components should be placed in ambient conditions of 15-30°C (59-86°F) for at least 24 hours prior to mixing and application.



Induction Time:

Not required



Viscosity: (23°C/73°F)

•	AFNOR4	17 - 24 seconds
•	BSB3	32 - 46 seconds
•	BSB4	18 - 25 seconds
•	FORD4	15 - 21 seconds
•	ISO4	27 - 43 seconds
•	ZAHN2	20 - 28 seconds

Note: Viscosities quoted are typical ranges obtained when using specified mix ratio.



Pot Life:

Reducer	Pot Life @ 21 - 25°C (70 - 77°F)
CA8000C	3 hours
CA8000C1	2 hours
CA8000C2	1.5 hours
CA8000C3	1 hour

Application Guidelines

Recommended Application Conditions:

Temperature 15 - 30°C (59 - 86°F)

Relative Humidity 30 - 85%

Application:

Apply CA8000 solid colour as a full single coat followed by a heavier double coat (if necessary) Apply Mica varnish as a single coat followed by a heavier double coat (if necessary) Apply clear coat as a double coat followed by a heavier double coat (if necessary) See drying table for inter-coat times.



Note:

Remove ALL filters from the spray gun and pumps before spraying and agitate Mica during the application.



Theoretical Coverage: (ready for use)

12.5 m²/Lt @ 40 µm dry film thickness 500 ft²/US gal @ 1.6 mil dry film thickness

Recommended Dry Film Thickness:

30 -50 µm 1.2 - 2 (mil)



Dry Film Density:

1.50 g/cm³ (white) 12.5 lbs/US gal

Dry Film Weight:

60 g/m 2 @ 40 µm dry film thickness 0.012 lbs/ft 2 @ 1.6 mil dry film thickness

Note: These application guidelines represent PPG's best advice for usage in standard conditions. Some parameters will be influenced by environmental conditions, equipment settings, and other variables.

Equipment:



Equipment Type	Tip Size	Flow Rate	Pressure
Airmix		Not Recommended	
HVLP Air Spray	1.2 to 1.4 mm		22 to 29 psi (1.5 to 2 bars)
Conventional Air Spray	1.4 to 1.5 mm		43 to 72 psi (3 to 5 bars)
Airless	Not Recommended		
Air-assisted Airless Electrostatic		Not Recommended	
Electrostatic Air Spray Gun	1.2 to 1.5 mm	320 to 360 ml/min	72 to 87 psi (5 to 6 bar)

Note: Pressure may need to be optimised to suit local conditions

Equipment Cleaning:

Clean spray equipment before use and as soon as possible after use, DeSoto[®] CN20, CN44 or Desoclean[™] 45 solvent cleaners are recommended.

Physical Properties



Colour:

Mica effects are available in a wide range of colours.



Gloss:

> = 90 units with a 60° gloss meter

Drying Times: @ 23°C (73°F) 50 % Relative Humidity



		CA8000C	CA8000C1	CA8000C2	CA8000C3
CA8000	Wet-on- Wet	1.5 to 2 hours	1 to 1.5 hours	30 to 45 minutes	45 to 20
Overcoat Time	Do Not Overcoat	2 to 10 hours	1.5 to 6 hours	45 minutes to 3 hours	15 to 30 minutes
	Dry Film	10 to 96 hours	6 to 72 hours	3 to 24 hours	
CA8000 Mica Intercoat Time		1.5 to 2 hours	1 to 1.5 hours	30 to 45 minutes	15 to 30 minutes
CA8000 Mica Overcoat Time		6 to 7 hours	4 to 5 hours	2 to 3 hours	1 to 2 hours

	Clear Coat 8001B0900C
Intercoat Time	1 to 1.5 hours
Dry to Overcoat (if required)	8 to 72 hours
Full Cure	7 days

Note: Drying times listed above are dependent upon film thickness applied, air flow conditions and application technique.



Flash Off Time:

30 minutes after application of final coat.



Special Note:

For aircraft re-painting a minimum period of 48 hours is recommended before flying.



VOC: (ASTM)

Mixed ready for use<420 g/Lt</th>CA8000 Base Component340-360 g/LtCA8000B Activator110 g/LtCA8000C Series Reducers720-760 g/Lt



Flash Point:

 CA800 Base Component
 33°C (91°F)

 CA8000B Activator
 47°C (117°F)

 CA8000C Series Reducers
 22°C (72°F)

Shelf Life:

CA8000 Base Component

CA8000B Activator

CA8000C Series Reducers

24 months in original unopened container
24 months in original unopened container
24 months in original unopened container

Note: Shelf life may vary due to OEM specification requirements. Refer to container label for specific shelf life information.

<u>Note:</u> The application and performance property values above are typical for the material, but not intended for use in specifications or for acceptance inspection criteria because of variations in testing methods, conditions and configurations.

Storage Recommendations



Inspect the condition of the container to ensure compliance. The material should be stored at temperatures between 5°C to 35°C (41°F to 95°F) to ensure shelf life.

Note: When procuring to a qualified material specification, follow those storage instructions.

Health Precautions

This product is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Safety Data Sheet (SDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. An SDS is available on request. Avoid overexposure. Obtain medical care in case of extreme overexposure.

For industrial use only. Keep away from children.

Additional information can be found at: www.ppgaerospace.com

For sales and ordering information call the local PPG office at the numbers listed below:

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