

463-6-4

High Temperature Epoxy Coating

Technical Data Sheet

Product Group

High temperature coating

Characteristics



Product
Information

Chemically cured aluminized high temperature epoxy coating especially designed to provide maximum protection for ferrous and non-ferrous metals against fresh and salt water, aircraft fuels, hydraulic fluids, engine fuels and corrosion causing media.

Components



Curing Solution
Thinner

Curing Solution X-306
Thinner TL-52 (optional)

Specifications



Qualified
Product List

Boeing BAC 5755, TY 10
General Electric GE-A8B58-S1

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.

On aluminum:

- Degrease thoroughly and pretreat metal surfaces chemically. (Chromic acid anodizing, sulfuric acid anodizing, acid chromate pickling, Alodine 1200, Alochrome, Iridite)

Repair areas:

- Clean and degrease with solvent cleaner and Scotch-Brite[®], Type "A" very fine and pretreat chemically. (Alodine 1200, Alochrome, Iridite)

Other substrates:

- Chemically clean and treat or abrasive-blast clean steel and stainless steel as required.

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Instruction for Use



Mixing Ratio
(volume)

3 parts
1 part
0-1.0 parts

Base 463-6-4
Curing Solution X-306
Thinner TL-52 (optional)

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



Induction Time

15 – 30 minutes



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

15 – 17 seconds Zahn-Cup #2
27 – 33 seconds Zahn-Cup #1



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)

16 hours



Dry Film
Thickness
(DFT)

12 – 18 micron (μm)
0.5 – 0.7 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

Air Nozzle orifice 1.4 mm (0.055")
Atomizing air pressure 45 - 60 psi
Fluid pressure 6 psi

Airless Nozzle orifice
0.279 mm (0.011"), 60°
0.330 mm (0.013"), 80°



Number of
Coats

Spray one uniform wet coat.












Cleaning of
Equipment

Use a VOC compliant solvent blend.

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Physical Properties

	Drying Times (25 +/- 2°C / 77 +/- 2°F, 55 +/- 5% RH)	Dry to touch 15 – 30 minutes Dry to recoat 1 – 2 hours Full cure 7 days
	Heat Resistance	Continuous operation at 300°F (149°C) Intermittent Peak Temperature of 350°F (177°C) Some discoloration will take place but film integrity is maintained.
	Theoretical Coverage	7.3 m ² per liter ready to apply at 25 µm dry film thickness 299 ft ² per US gallon ready to apply at 1 mil dry film thickness
	Dry Film Weight	40 g/m ² /25 micron .008 lbs/ft ² /1 mil
	Density	0.98 ± 0.02 grams/cm ³ 8.14 ± 0.2 lbs/gal
	Volatile Organic Compounds	Max 700 g/l Max 5.8 lb/gal
	Gloss (60°)	< 15 GU
	Color	Aluminum
	Flash-point	463-6-4 -4°C / 25°F X-306 12°C / 54°F TL-52 -4°C / 25°F

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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)

18 months per AkzoNobel Aerospace Coatings commercial specification for 463-6-4 and X-306. 24 months for TL-52. 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.

Issue date: January 2015 (supersedes February 2011) - FOR PROFESSIONAL USE ONLY

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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