

Metaflex SP 1050 Pretreatment

Technical Data Sheet

Product Group

Surface preparation

Characteristics



Product
Information

Metaflex SP1050 Pretreatment is a water-based chrome-free surface pretreatment that gives superior adhesion, improved paint flexibility, and advanced corrosion protection on painted surfaces when used as part of a coating system.

- 1 component system.
 - Low VOC.
 - Tested on several substrates including aluminum, composite, titanium.
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Specifications



Qualified Product
List

Gulfstream	GMS 5008 (reference ECM 20001)
Italian Ministry of Defense	AER (EP).M-P-001
SAE	AMS3095A
Eurocopter	ECS7118
Airbus	AIMS 04-04-072

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.

Surface Conditions



Cleaning

- Ensure that the surface area is free of loose debris, such as paint chips or any residue, as well as silicon and other foreign matter
 - When used after paint alkaline stripper, remove all stripper residues according to stripper manufacturer guidelines, and finalize the preparation process by rinsing surface with copious amounts of water (preferably hot water).
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Instruction for Use



Mixing Ratio
(volume)

Metaflex SP 1050 is a single component product used at full concentration for most applications.



Note

Allow products to acclimatize to room temperature before use.

Metaflex SP 1050

Pretreatment



Induction Time

Not applicable.



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

Ready for use.

Application Recommendations



Conditions

Temperature:

4 – 43°C

40 – 110°F

Relative Humidity:

0 – 100%



Note

In low humidity conditions, apply Metaflex SP 1050 in smaller areas.

In high humidity conditions, Metaflex SP 1050 can be applied in larger areas.

Metaflex SP 1050 may be applied in conditions outside of the the limits shown above. Care must be excersised to ensure a satisfactory result. Please contact your local AkzoNobel Aerospace Coatings representative to determine the proper application techniques when environmental conditions fall outside of the recommended range.



Equipment

Sprayer .065" - .071"

Pole Scrubber or orbital abrader



Application
Procedure

- **Wipe off application:**

- Spray Metaflex SP 1050. Completely scrub surface with a 280-400 grit aluminum oxide pad, such as Scotch-Brite® Pads No. 07447 or equivalent. A pneumatic power buffer or pole scrubber may be used. Pay particular attention to leading edges and other high erosion areas.
- Spray again Metaflex SP1050. Completely scrub surface.
- Use a squeegee to remove residual Metaflex SP 1050 from surface. Dampen lint-free cotton cloths with water and perform a final wipe, slight grey residue is permitted (change soiled cloths frequently).
- Surface must be thoroughly wiped.
- Allow aircraft to static air dry. If a film or haze is visible on the aircraft, then wiping was not adequate and Metaflex SP 1050 has dried on the surface. If this occurs Metaflex SP 1050 must be reapplied to surface.

OR

Metaflex SP 1050

Pretreatment

- **Rinse off application:**
- Spray Metaflex SP 1050. Completely scrub surface with a 280-400 grit aluminum oxide pad, such as Scotch-Brite® Pads No. 07447 or equivalent. A pneumatic power buffer or pole scrubber may be used. Pay particular attention to leading edges and other high erosion areas.
- Spray again Metaflex SP 1050. Completely scrub surface.
- Rinse the aircraft thoroughly.
- Check for water break free surface.
- Repeat Metaflex SP 1050 process if a water break-free surface is not obtained.
- Allow aircraft surfaces to dry completely prior to primer application



Cleaning of equipment

Thoroughly rinse with water.



Note

Use only alumina pads. Use of any other pad may contaminate surface and prevent adhesion of primer.

Do not allow Metaflex SP 1050 to dry during application.

Do not apply a solvent wipe after Metaflex SP 1050 application.

Prior to priming, if there is dust on the surface it can be removed by using a water dampened, lint-free cloth.

If fuels and oils are on the surface, moisten a lint-free cloth with Metaflex SP 1050 and wipe fluid off in one direction so as not to smear the contaminant. In the same direction immediately wipe excess Metaflex SP 1050 off with a dry lint-free cloth.

Paint surface within 24 hours with required coating system.

Refer to the Metaflex SP 1050 Application sheets for more detailed descriptions of the application processes.

Physical Properties



Theoretical Coverage

6-7.5 m² per Liter (250-300 ft² per US Gallon)



Volatile Organic Compounds

69.5 g/L (0.58 lb/gal)

Metaflex SP 1050 Pretreatment



Flash-point >93 °C/ 199 °F.



Storage Store the product dry and at a temperature between 5 and 38°C / 41 and 100°F.
Do not allow product to freeze.
Store in the original unopened containers.
Once opened it is recommended that the product is used within 12 months.
Containers should be sealed when not in use.

Shelf life	Metaflex SP 1050 Pretreatment	36 months
5 - 38°C (41 - 100°F)		

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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