Product information



Solvent based polyurethane coating, used to protect aircraft parts against erosion.

MAPCOAT TF should be applied with Mapaero 9014-B PRIMER (see TDS).

Components



Base MAPCOAT TF Hardener / Catalyst MAPCOAT Thinner MAPCOAT

Specifications



Qualified in accordance with:

Embraer: MEP 10-124

Product information mentioned in the technical datasheet are given for information puposes and can differ from requirement of the specification above. In that case, customer requirements are valid for your application.

Physical properties



THEORETICAL COVERAGE

 $2.5\ m^2/kg$ for 200 μm (7.9 mils) dry (base and hardener undiluted)

DRY FILM WEIGHT

1.25

VOC

440 g/L (3.67 lbs/gal) (ISO11890-1 and ASTM D3960)

COLOR

White FS 37875, Grey FS 36173, Black FS 37038

SHELF LIFE / STORAGE

24 months for the base and the hardener, and 48 months for the thinner, stored between 5°C and 35°C (41°F and 95°F) in full and sealed original packaging.

GLOSS LEVEL

 8 ± 3 GU under 60°

NOTES

The theorical consumption value doesn't take into account the transfer efficiency for spray application.

Surface preparation



- On carbon composites:

Reactivate then degrease the composite with alcohol or MEK. Application of PRIMER 9014-B (solvent-based) Let it flash off 30 minutes to 1 hour at room temperature.

- On steel:

Sand blasting and cleaning with MEK Application of AEROPRIM 530 primer immediately after sand blasting. Force-cured for 1 hour at 60°C Application of PRIMER 9014-B Let flash-off 30 minutes to 1 hour.

N.B.: For proper adhesion results, MAPCOAT TF should be applied within 30 to 60 minutes after application of the PRIMER 9014-B.

It must still be wet.

All recommendations mentioned above are given for information purposes.

MAPCOAT TF AkzoNobel SPECIAL COATINGS

Instructions for use

SPRAY APPLICATION

MIXING RATIO

Hardener / Catalyst Thinner

Mixing ratio by weight

100 45 0 to 15

MIXING PROCEDURE

Ideally, unmixed products should be stored between 18°C (64.4°F) and 25°C (77°F) for 24 hours before use. MAPCOAT TF base should be mixed for 10 minutes with a pneumatic or oscillating mixer. Mix base and hardener until the mixture is homogeneous. Then add the thinner and mix. Mixture must be made at a temperature between 15°C and 35°C (59° and 95°F). Remark: It is recommended to sieve the paint through a 120-190 µm (4.7-7.5 mils) filter.

INDUCTION TIME

5 minutes

Spraying viscosity at 20°C / 68°F

AFNOR CUP Dilution 15% $25s \pm 5s$

POT LIFE

1 hour

NOTE

. The viscosities mentioned above is corresponding to the recommended range of viscosity to ensure compliant application. The range of dilution must be used to adjust viscosity to reach the recommended one.



CONDITIONS

Temperature 15°C (59°F) to 35°C (95°F) Relative humidity 30 % to 75 %

Gravity compressed air gun Nozzle 1.5 mm to 2 mm

DRY / WET FILM THICKNESS

180 μm to 250 μm (7.1 to 9.8 mils) dry/ 360 μm to 500 μm (14.2 to 19.7 mils) wet

NUMBER OF COATS

5 crossed coats with 5 minutes between each coat.

EQUIPMENT CLEANING

Clean the equipment with a suitable thinner such as MAPCOAT from Mapaero or MEK

Spray with a dry and oil-free air.

MAPCOAT TF AkzoNobel SPECIAL COATINGS

Drying times



Dust free Dry to handle **Fully Cured**

Drying times have determined using pieces of a thickness < 2mm and for 215µm (8.5 mils) of dry film. Let it flash off 1 hour at room temperature before accelerated drying.

* NA: Not applicable

23°C (73.4°F) 6 hours 24 hours 7 days

Defects & corrections

1) Remove defective areas:

Sand MAPCOAT TF with P150 grade sand paper and finish with P400 on areas affected by the repair to have a smooth surface.

Protect the edges of the area to be repaired by masking tape.
Reactivate the surface with cleaned lint-free cloth soaked with Methyl Ethyl Ketone.
After flash-off, apply MAPCOAT TF.

- Arter hash-on, apply MAPCOAT TF.
- Remove the masking from surrounding areas within 90 minutes following application of MAPCOAT TF.
- Drying for 24 hours at 23°C (73°F) then 24 hours at 70°C (158°F) for fully cured.

Health & Safety



See the product Material Safety Data Sheet.

The MSDS are available through our website www.mapaero.com



MAPCOAT TF Kits are available in 1kg (690g base and 310g hardener). The MAPCOAT thinner is available in 1L

WARRANTY: We guarantee our products against hidden defaults over material and preparation. Our Responsibility is limited to the obligation of freely replacing the defective material without there being a claim for any compensation. The advice we give is based on our experience but it might not be absolutely right. Consequently this does not imply our responsibility in case of inefficiency. Furthermore our company cannot be responsible for any material or corporal damages caused due to a misuse or mishandling of our products. Any concession to these clauses, to be valid, must be an official document issued by our offices and signed by our direction.