PRIMER MSP-1

COATINGS FOR AIRCRAFT STRUCTURE PROTECTION

AkzoNobel

Product information



Chrome free water reducible epoxy anticorrosive primer.
This product has especially been developed for application on various types of metallic substrates such as Aluminum alloys and Steel with different

Components



Hardener / Catalyst MSP-1 Thinner Demineralized Water

Specifications



Qualified in accordance with:

LIEBHERR AEROSPACE: T-LABO-QUA-0607

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

Physical properties



THEORETICAL COVERAGE

 $23m^2/L$ for $25\mu m$ (1mil) dry undiluted

DRY FILM WEIGHT

160 g/l (ISO11890-1) and 350 g/L (ASTM D3960)

Grey Bac 707 - Other colors available upon request

SHELF LIFE / STORAGE

18 months for Base and Hardener stored between 5°C and 35°C (41°F and 95°F) in full and sealed original packaging.

GLOSS LEVEL Below 20 GU under 60°

Gloss levels have been determined thanks to glossmeter with 60° angle of incidence. The theorical coverage value doesn't take into account the transfer efficiency for spray application.

Surface preparation



Excellent adhesion and anticorrosive properties on various types of substrates such as:
- Aluminium treated sealed or unsealed CAA
- Aluminium treated sealed or unsealed SAA

- Aluminium treated conversion coatings
- Passivated stainless Steel
 Steel treated Zn-Ni
- Phosphate Steel

NB: For other materials or surface treatment, please contact us.

All recommendations mentioned above are given for information.

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Instructions for use

SPRAY APPLICATION

MIXING RATIO

	Mixing ratio by weight	Mixing ratio by volume
Base	100	3V
Hardener / Catalyst	46	2V
Water	100 to 125	5 to 6V

MIXING PROCEDURE

Ideally, the unmixed products should be stored between 18°C and 25°C (64°F and 77°F) for 24 hours before use.

Mix the base and hardener until the mixture is homogenous. Then, add the demineralised water in two stages (minimum 1V of Water for the first stage). The mixture must be made at a temperature between 15°C and 35°C (60-95°F).

INDUCTION TIME

None

Spraying viscosity at 20°C / 68°F

ISO 4 Cup	CA4 Cup
6V Dilution	6V Dilution
20 to 40s	18 to 27s

POT LIFE

6 hours at 23°C

Viscosities mentioned above are 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.

Water based paints show a thixotropic behaviour. This implies that efflux time can vary according different parameters such as: type of mixing, mixing quantity, dilution, temperature, time between mixing and viscosity measurement

Instructions for use



BRUSH APPLICATION

	Mixing ratio by weight	Mixing ratio by volume
Base	100	3V
Hardener / Catalyst	46	2V

MIXING PROCEDURE

Ideally, the unmixed products should be stored between 18°C and 25°C (64°F and 77°F) for 24 hours before use.

Mix the base and hardener until the mixture is homogenous.

INDUCTION TIME

None

POT LIFE

2 hours at 23°C

Application recommendations



CONDITIONS

Temperature 15 to 35°C (59 to 95°F) Relative humidity 20 to 85%

EQUIPMENT

Conventional Spray gun Nozzle 1.2 to 1.8 mm

DRY / WET FILM THICKNESS

50 to $80\mu m$ wet / 15 to $25\mu m$ dry

NUMBER OF COATS

Apply two wet layers to obtain 15 to 25µm dry (optimum dilution is 120 or 5.5V).

EQUIPMENT CLEANING

Clean the equipment with a suitable cleaning solvent such as D760 thinner.

Spray with dry and oil-free air.

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Drying times



Dust free Dry to handle Dry to tape Recoatable **Fully Cured**

23°C (73°F) 15 min 1 hour 2 hours 1 hour to 24 hours 7 days

60°C (140°F) 5 min 20 min 40 min 45 minutes to 1 hour 30 3 hours

Drying times have been determined using test pieces of a thickness <2mm and for 20 μm (0.8 mils) of dry film. To recoat with a PU topcoat we do recommend to oven cure MSP-1 primer prior to topcoat application. Flash-off is not mandatory when curing temperature is <70°C (158°F).

*N.A.: Not applicable

Defects & corrections





Health & Safety

See the product Safety Data Sheets. The MSDS are available through our website www.mapaero.com

Packing



MSP-1 base is available in 3 liters can. MSP-1 hardener is available in 2 liters can.

- 1 liter kit: 300 mL MSP-1 Base + 200 mL MSP-1 Hardener

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.