PRIMER P65-HG

COATINGS FOR AIRCRAFT STRUCTURE PROTECTION

AkzoNobel

Product information

Chromate-free water-based epoxy high gloss primer three component. P65-HG primer is used on composite structures to reveal the defects (porosity, scratches…) and to guarantee their protection.
This primer can be used in combination with M50 filler/putty from MAPAERO.

Components

Base P65-HG
Hardener / Catalyst H88
Thinner Water (AIMS 09-00-003 grades A, B and C)

Specifications

Qualified in accordance with:
Airbus: AIMS 04-04-050

Product information mentioned in the technical datasheet is 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
23 m²/L (937 ft²/gal) for 20 µm (0.8 mils) dry

DRY FILM WEIGHT
1.6

VOC
130 g/L (ISO11890-1) or 250 g/L (ASTM D3960)

COLOR
Beige RAL1001

SHELF LIFE / STORAGE
12 months for the base and hardener, stored between 5°C and 35°C (41°F and 95°F) and in full and sealed original packaging.
6 months, stored in Touch-Up Kit stored between 5°C and 35°C (41°F and 95°F) in full and sealed original packaging

GLOSS LEVEL
70 GU below 60°

NOTES
Gloss levels have been determined using glossmeter with an angle of incidence of 60°C.
The theorical consumption value doesn't take into account the transfer efficiency for spray application

Surface preparation

P65-HG primer can be applied directly on composite pieces, suitably degreased and sanded with a Scotch Brite paper.
It can be applied on M50 filler/putty, previously sanded according to the product technical data sheet.

All recommandations 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	2 V
Hardener / Catalyst	43	1 V
Water	50 to 60	1.3 V to 1.6

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.
The P65-HG should be mixed for 10 minutes in a pneumatic or oscillating mixer before use.
Mix the base and the hardener until the mixture is homogeneous before adding demineralised water. The mixture must be made at a temperature between 15°C (59°F) and 35°C (95°F).
Sieve the paint through a 120-150 µm (4.7-5.9 mils) filter.
Never add additional water once the paint mixture has been made.

INDUCTION TIME
None

Spraying viscosity at 20°C / 68°F

ISO 4	CA 4
1.4 V	1.4 V
43 ± 6s	20 ± 3s

POT LIFE
3 hours for a 1.4 V dilution

NOTE
Pot life depends on the dilution ratio.

The paint viscosity may vary depending on the temperature and increase over the pot life.

For an application with a two-component mixing machine, it is possible to mix first 2 volumes of base P65-HG with 1 volume of demineralised water.

The following mix has to be done:
Pre-mix base + 3V of water water (This pre-mix can be stored 1 month between 5 °C et 35 °C or 41°F and 95°F). Hardener : 1V.
Final performances of the product remain unchanged compared to the 3-components mixture.

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

ISO 4 cup is the reference cup. The others are given for information purpose.

Instructions for use

BRUSH APPLICATION

	Mixing ratio by weight	Mixing ratio by volume
Base	100	2 V
Hardener / Catalyst	43	1 V

INDUCTION TIME
None

POT LIFE
2 hours undiluted

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Application recommendations

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

EQUIPMENT
Gravity compressed air gun Nozzle 1 mm to 1.8 mm

DRY / WET FILM THICKNESS
15 µm to 25 µm (0.6 to 1 mils) dry /20 µm to 45 µm (0.8 to 1.8 mils) wet.

NUMBER OF COATS
Apply 1 crossed coat to achieve a 15 µm to 25 µm (0.6 to 1 mil) dry thickness. Each coat has to be wet and of the same thickness.
The number of coats depends on the size and the shape of the part to be painted.
The recommended dynamic air pressure is 2 bar to 4 bar (29 to 58 psi).

EQUIPMENT CLEANING
Clean the equipment with a suitable cleaning solvent such as Mapaero D760. Mapaero D770-B aqueous cleaning solvent can also be used.

NOTE
Spray with dry, oil-free air.

Drying times

	23°C (73°F)	60 ° C (140°F)	80 ° C (176°F)
Dust free	2 hours	45 minutes	5 minutes
Dry to handle	7 hours	1 hour 15 minutes	20 minutes
Recoatable	2 hours to 168 hours	45 minutes to 2 hours	5 minutes to 45 minutes
Fully Cured	7 days	2 hours	45 minutes

NOTE
Drying times have been determined using test pieces of 1 mm thickness, with a 20 µm (0.8 mils) dry film.
Before accelerated drying 70°C (158°F), let it flash off for at least 15 minutes at room temperature.
Parts whose drying was forced must cool down to below 35 °C (95°F) before proceeding to the next step. To recoat P65-HG primer with another product/primer, contact us.
For the P65-HG primer infrared drying, contact us.
Drying time and temperature (evaporation and curing) are given for information only and may vary depending on humidity, the shape and the material of the workpiece and the thickness of the paint.

*N.A. : Not applicable

Defects & corrections

In the event of a defect, contact your Quality Department.

For a dry thickness < 15µm (0.6 mils):
Apply a thin layer to obtain the right thickness. If the recoating time is exceeded, reactivate with a Scotch-Brite type® A.

If there are micro-bubbles, running, rejects or numerous inclusions:
Reactivate slightly, using an abrasive paper grade P240 or P320.
Remove dust using a suitable cloth and apply a thin coat of primer, as described above.

Health & Safety

See the product Safety Data Sheet.

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

Packing

The base P65-HG is available in 4 L and 200 L.

The hardener H88 is available in 2 L and 200 L.

45 ml Touch-Up Kits (TUK) (30 ml P65-HG + 15 ml H88 Hardener);

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