SOCOGEL A0203 BLUE

ADHESION PROMOTER BEFORE PAINTING

Technical Data Sheet

Approvals and conformities

AIRBUS	AIMS 04-04-053 / IPS 04-04-053-01 / AIPI 05-02-018 CML 10PEG1
GE	EMPIS A15B214B1

Chrome free sol-gel that solves aerospace rivet rash issues and enhances the adhesion of primers and paints on metallic surfaces.

SOCOGEL A0203 BLUE is an aqueous solution of zirconium salts, activated by an organo-silicon compound. After application, the solution forms a high performance sol-gel hybrid coating, which enhances the adhesion of paint systems on metals and alloys such as aluminium, titanium, stainless steel.

SOCOGEL A0203 BLUE main characteristics :

- **is a patented technology**
- **enhances painting adhesion and durability of most of the current paint systems**
- **is designed to solve the rivet rash issue**
- **is a chromium free conversion product -** an interesting alternative to highly harmful chromate conversion technologies
- **is a potential process cost saving as no rinsing** is required after application (no rinsing process, neither effluent treatment)
- **is blue** to visualise the product when applied.

USES

SOCOGEL A0203 BLUE increases adhesion of primers and epoxy based paints on metallic surfaces . These coatings could be water or solvent-based, high solids content primers or paints, chromated or non-chromated paint system.
SOCOGEL A0203 BLUE is specially adapted to reactivate structural primer before applying the external epoxy primer and to enhance paint system adhesion. It is compatible with composite materials and metallics.
It is designed for both manufacturing and maintenance operations on aircraft airframes.

DIRECTIONS FOR USE

MIXING PROCESS

- Two-component product : one part C and one part EC

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Asia +86 21 5813 1133 Europe Middle East Africa +33 (0)2 97 63 05 01 North America +1 (817) 335-1826 South America +55 11 96660-7169

- Dispense Part C into part EC.
- Depending on the kit size, mix or shake thoroughly for a minimum of 30 seconds. For kits exceeding 1 litre, use a clean mixer. For 30L drums, Kremlin Cyclix mixer is recommended.
- Allow the solution to induct for a minimum of 30 minutes. Remix prior to application.

WARNING! the two parts must be free of precipitates. If not, the material must be rejected. The original packaging must be perfectly closed. **SOCOGEL A0203 BLUE** is a two-component product with a limited shelf life. These are single-use kits.

SURFACE PREPARATION

- Mask high strength steel parts as landing gears to prevent any contacts with liquid SOCOGEL A0203 during the application.
- Clean the area to be painted with **DIESTONE DLS** wipes.
- Abrade the area to be painted with scotch brite or fine abrasive paper (minimum 240 grade sandpaper (320 grade recommended).
- Note 1 : a perfect abrasion on rivets is required to prevent rivet rash.
- Clean the surface with **DIESTONE DLS** wipes and allows drying.
- Note 2 : if the time between the end of the surface preparation and the application of the sol gel is over 2 hours, or if the area is dusty use tack rag to remove dust.
- Mix thoroughly the two part material and let react 30 minutes at room temperature.

APPLICATION

SOCOGEL A0203 BLUE can be applied by spraying, brushing, dipping or wiping.

Note : Apply **SOCOGEL A0203 BLUE** within 24 hours of deoxidising. Protect coated surface from contamination if the primer or paint is not applied straight after the SOCOGEL treatment.

By spraying:

- Stainless steel spray guns are recommended such as
  - Gravity SATA jet 5000B or KREMLIN MG22G-HPA with following parameters: Nozzle size: 1.3 mm & Air pressure: 5/6 bars & Application distance: 1.25+/-0.25 meter
  - Any equipment including HVLP – AIRLESS - AIRMIX – Hand pumps, sprayers… selected after trials.
- Method: spray a thin coat to avoid runs in just wetting the surface. Let dry 60 minutes. After drying the blue visual color allows a visual inspection.

By wiping: **The properties and performance of SOCOGEL A0203 BLUE are only guaranteed with the use of SOCOSAT PPA60 (29x42 cm) wipes.**

- Take one new pouch of wipes and pour 1L of mixed **SOCOGEL A0203 BLUE** into it. Be sure that all wipes are homogeneously saturated before applying.
- Refer to the application guide of SOCOGEL A0203 BLUE in wipes
- To get the right covering power of SOCOGEL, use 1 wipe for aroung 1.5 m².

For any application:

- If wettability troubles occur, this reveals bad surface preparation.
- **Allow to dry for about 1 hour before applying the primer/paint system, but within 11 hours after drying.** The drying time may be reduced by forced air heating at 60°C (120°F) for about 10 to 15 minutes.

TECHNICAL CHARACTERISTICS

Appearance ..... blue after mixing
Induction time ..... 30 minutes
Pot life of the product after induction ..... 12 hours
Covering power ..... (by spraying) 30-40 m²/litre
Covering power ..... (by wiping) 1.5 m²/ wipe - 50-60 m²/litre
Freezing point ..... -21°C/-6°F

PRECAUTIONS FOR USE AND STORAGE

Store in original closed packaging below 40°C/104°F.
Shelf life: The best before date is written on the product label by "use before".
The kits must be used in a single operation. Don't use previously opened units.
All of each part must be entirely mixed. Do not partially dispense product and mix.

For more information regarding the danger of the product, please consult the product safety data sheet according to local regulation.
In confined spaces, appropriate ventilation and personal protective equipment are recommended.
For professional use only.

This technical data sheet replaces and cancels the previous one.