

SOCOGEL B0202 - SOCOGEL B0202 BLUE

CHROMIUM FREE CONVERSION BEFORE PAINTING

Technical Data Sheet

Approvals and conformities

BOEING	BMS 10-128 QPL Rev A Type I Grade A, Class A (SOCOGEL B0202)
BOEING	BMS 10-128 QPL Rev A Type I Grade A, Class B (SOCOGEL B0202 Blue)
COMAC	CMS-CT-401 QPL (SOCOGEL B0202 & SOCOGEL B0202 BLUE)
DASSAULT AVIATION	DGT 345929 (SOCOGEL B0202)
GE	EMPIS A15B214A1 (SOCOGEL B0202) & EMPIS A15B214A2 (SOCOGEL B0202 BLUE)
SAE	AMS 3095 QPL (MANKIEWICZ SEEVENAX CF H/S Primer 113-44, ALEXIT BCCC)
SAE	AMS 3095 QPL (MANKIEWICZ SEEVENAX LOW VOC Primer 113-07, ALEXIT TC or BCCC)
SAE	AMS 3095 QPL (AKZO AERODUR LV 2114 primer, Aviox BC/CC)
UNITED AIRLINES	M&E: 00-0608-3-1880, Product code: PRI3014-500ml

Pre-paint surface preparation sol-gel with enhanced adhesion and anti-corrosion properties. Increases adhesion of aircraft primers and paints on metallic surfaces.

SOCOGEL B0202 is a sol-gel developed from a technology licensed by BOEING.

Solgel conversion products are aqueous solutions of zirconium salts, activated by an organo-silicon compound. After application, the Solgel solution forms a high performance hybrid coating, which enhances the adhesion of paint systems on metals and alloys such as Aluminium, Titanium, Stainless Steel,

SOCOGEL B0202 or SOCOGEL B0202 BLUE performances comply with current aeronautical requirements and are an interesting alternative to chromate conversion technologies that are recognised as highly harmful for workers (classification H350: may cause cancer) which generate increasing waste treatment costs (baths, effluents). SOCOGEL B0202 or SOCOGEL B0202 BLUE use is also more economical in terms of operating costs and effluent treatment, because no rinsing is required after application.

SOCOGEL B0202 or SOCOGEL B0202 BLUE is available in the form of 2 component kits, in a colourless version (SOCOGEL B0202) or blue one (SOCOGEL B0202 BLUE) used to visualise the product when applied.

1/4

SOCOGEL B0202 & BLUE_14002/14003A2GB2021-02-19PT-FS

This coating technology is covered by one or more of the following patents: US20080111027 - EP2102384

USES

SOCOGEL B0202 or **SOCOGEL B0202 BLUE** is a chromium free conversion product. The adhesion of primers and epoxy based paints on metallic surfaces are significantly increased. These coatings could be water or solvent-based, high solids content primers or paints...

SOCOGEL B0202 or **SOCOGEL B0202 BLUE** is compatible with composite materials.

SOCOGEL B0202 or **SOCOGEL B0202 BLUE** is designed for surface preparation prior to painting on basic parts, sub-units, or complete aircraft. It is designed for OEM and for MRO during airframe maintenance operations.

DIRECTIONS FOR USE

MIXING PROCESS

- Two-component product : one part C and one part G (colourless version) or E (blue version)
- Dispense Part C into part G (colourless version) or in Part E (blue version).
- Depending on the kit size, mix or shake thoroughly for a minimum of 30 seconds. (for kits exceeding 1 litre, use a clean mixer).
- 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 B0202** or **SOCOGEL B0202 BLUE** is a two-component product with a limited shelf life. **These are single-use kits.**

All sol-gel kits **MUST** be used in a single operation, **NEVER** mix the parts only partially, they must always be mixed completely.

SURFACE PREPARATION

SOCOGEL B0202 or **SOCOGEL B0202 BLUE** must be applied on a surface that has been perfectly degreased and deoxidised, either chemically, mechanically or by manual sanding (to give a water break-free surface).

- Mask high strength steel parts as landing gears to prevent any contacts with liquid **SOCOGEL B0202** or **SOCOGEL B0202 BLUE** 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)).
- Clean the surface with **DIESTONE DLS** wipes and allows drying.

APPLICATION

SOCOGEL B0202 or **SOCOGEL B0202 BLUE** can be applied by spraying, brushing, dipping or by

wiping.

Note: Apply **SOCOGEL B0202** or **SOCOGEL B0202 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 (or equivalents) with following parameters: Nozzle size: 1.3 mm & Air pressure: 5/6 bars & Applications distance: 1.25+/-0.25 meter.
- Any equipment including HVLP - AIRLESS - AIRMIX - Hand pumps, sprayers...selected after trials.

Method: Spray the product onto the surface until it is completely wetted, but without product flowing. An uneven drainage may result in non-uniform appearance. Remove excess solution where it becomes trapped such as along drip edges. Blot or sponge excess solution so as to leave a thin, wet film on the part surface.

By wiping: The properties and performance of **SOCOGEL B0202** or **SOCOGEL B0202 BLUE** are only guaranteed with the use of **SOCOSAT PPA60 (29x42 cm)** wipes.

- Take one new pouch of wipes and pour the mixed **SOCOGEL B0202** or **SOCOGEL B0202 BLUE** into it. Be sure that all wipes are homogeneously saturated before applying.
- Refer to the application guide of SOCOGEL B0202 or SOCOGEL B0202 BLUE in wipes.
- To get the right covering power of SOCOGEL, use 1 wipe for around 1.5 m².

For local touch-up: Use the specific SOCOMORE pen after filling with properly mixed SOCOGEL B0202 or SOCOGEL B0202 BLUE. Refer to the application guide *SOCOGEL A0203 / SOCOGEL B0202 / SOCOGEL B0202 BLUE (PEN)*

For any application:

- If wettability troubles occur, this reveals bad surface preparation.
- Dry to overcoat:
 - Minimum 1 Hour, may be reduced by forced air heating at 60°C (120°F) for about 10 to 15 minutes(min)
 - Maximum 12 Hours, according to your OEM specifications. May be extended to 168 Hrs for other applications and after testing.

TECHNICAL CHARACTERISTICS

Appearance slightly coloured after mixing (or blue for SOCOGEL B0202 Blue)
Induction time 30 minutes
Pot life of the product after induction 24 hours (max)
Covering power (by spraying) 30-40 m²/litre
Covering power (by wiping) 1,5 m²/wipe - 50-60 m²/litre
Freezing point -24°C/-11°F

PRECAUTIONS FOR USE AND STORAGE

Store in original closed packaging below 40°C/104°F.

Shelf life: 12 months from date of packaging. 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.

The above details have been compiled to the best of our knowledge. They have, however, an indicative value only and we therefore make no warranties and assume no liability in connection with any use of this information, particularly if a third party's rights are affected by the use of our products. The above information has been compiled based upon tests carried out by SOCOMORE. All data is subject to change as Socomore deems appropriate. The data given is not intended to substitute for any testing you must conduct in order to determine the suitability of the product for your particular purposes. Please check your local legislation applicable to the use of this product. Should you need any further information please contact us.