SURFACE PROTECTION COATING

Technical Data Sheet

SOCOGEL MSP is a chromium-free sol-gel solution that forms a multi-functional high performance coating once polymerized. It can be applied to moulds and/or parts to protect against mechanical solicitation and chemical exposure.

SOCOGEL MSP can be used in combination with a release agent during the demoulding process to both protect and prolong the life of the mould.

This coating technology is protected by the granted patent FR 05/51417, and the published patent WO 2007/003828.

SOCOGEL MSP features:

- Mechanical protection (impact (ISO 6272) and scratches (ISO 1518)
- Chemical protection (Skydrol®, solvents, acids, base) (ISO 2812)
- Corrosion protection on al-rich AA (5xxxx and 6xxxx series) (Salt Spray Test, ISO 9227)
- Multi-substrate adhesion (composites, metals, plastics, glass) (ISO 2409)
- Makes surfaces easier to clean

USES

SOCOGEL MSP can be applied on composites, metals, plastics and glass. It protects the unpainted surfaces of elementary parts and sub-assemblies from corrosion, mechanical and chemical attack.

DIRECTIONS FOR USE

MIXING PROCESS

SOCOGEL MSP is a two-component product: one part C, one part FTA.

- Pour part C into part FTA.
- Mix for 2 hours at room temperature (mix continuously in a closed container).
- Apply within 6 hours.
- The kits should only be used once, in a single operation. Do not use kits that are already open.

SURFACE PREPARATION

SOGOGEL MSP must be applied on surfaces that have been meticulously prepared, chemically or mechanically, for good wettability.

1/3



Socogel MSP draft2021-02-05PT - FS

www.socomore.com

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

Manual preparation - Composites and metallics

- Remove, if necessary, the release agent from the mould or part using DIESTONE A8287.
- Abrade the surface with Scotch-Brite[™] or steel wool. Use DIESTONE DLS or DIESTONE A8287 to clean during the process if necessary.
- Give the surface a final clean with DIESTONE DLS or DIESTONE A8287, and wipe-off. Repeat the cleaning process until the wipe remains clean.

Repeat the process if necessary to obtain good wettability.

Preparation in bath - Aluminium parts

- Clean with SOCOCLEAN A3432 (10% vol. concentration @ 55°C 131°F for 15 mins)
- Deoxidize with SOCOSURF A1858/ A1806 (40/10% vol. concentration @ 50°C 133°F for 5 mins)

Preparation in bath - Titanium parts

- Activate with HDL 202 (15% vol. concentration @ 80°C 176°F for 20 mins)
- Neutralize with SOCOSURF A1858 (50% vol. concentration @ 50°C 133°F for 5 mins)

APPLICATION

SOCOGEL MSP is applied by spray (KREMLIN pneumatic spray gun M22A HPA or HVLP type). Small parts can be dipped.

CURING

Cure parts at a minimum of 110°C for 30 minutes.

TECHNICAL CHARACTERISTICS

PRECAUTIONS FOR USE AND STORAGE

Store in original closed packaging between 0°C and 40°C (32°F and 104°F). Do not allow the components to freeze.

In confined spaces, appropriate ventilation and personal protective equipment are recommended.

Shelf life: 12 months from date of manufacture. The best before date is written on the product label under "use before".

For more information regarding the products dangers, please consult the product safety data sheet according to local regulation.

For professional use only.

2/3



Socogel MSP draft2021-02-05PT - FS

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.



socomore

www.socomore.com

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