

Approvals and conformities

AIRBUS	IPS 09-08-002-02 Type II (conform) / Maintenance application code 12ACC1 / CML 15-007X
ALSTOM	DTRF 150 611
DASSAULT AVIATION	DGQT 1.7.0103 Type III (conform)
DGA (French Army)	Fiche identification n° 4203 / AIR 8062 Type I- II (conform)
EADS CASA	Z11505
FORD - ANDROID INDUSTRIES GROUP	
LEROY SOMER	Rapport d'essai et d'homologation A.5/T.001
SAFRAN AIRCRAFT ENGINES (formerly SNECMA)	DMR 75-610
SAFRAN HELICOPTER ENGINES (formerly TURBOMECA)	CCT 00706
SNCF (French Railways)	STM 801
SPANAIR	

SOCOPAC 50S is an aircraft corrosion inhibitor that gives long lasting corrosion protection to commercial and military aircraft materials, spare parts and assemblies in unfavourable climatic conditions.

The film obtained forms a very efficient barrier against all causes of corrosion (water, oxygen, acids, basis and salts from industrial emissions, tropical atmospheres, etc.).

Its long-lasting corrosion preventive power allows a complete conservation guarantee after application on various materials such as aluminium and alloys, steels, light metals (titanium, magnesium), zinc and galvanized steel, copper and its alloys, cadmium. It can be applied without any risk of attack on painted surfaces, composite materials, plastics, rubbers, plexiglas and polycarbonates (non crazing).

SOCOPAC 50S has been formulated to offer the highest safety to the users as well as to the pieces to be protected; it is absolutely free of harmful solvents, toluene, xylene or chlorinated compounds.

- After drying **SOCOPAC 50S** leaves an impervious durable protective film, resistant to temperature differentials, heavy rain, sea air, tropical atmospheres or corrosive industrial

atmospheres.

- This film is medium hard, but wax-like and dry to the touch. Thanks to its flexibility, it can absorb slight impacts without damage or crazing. If the scratch is deeper, the capillary activity and polarity properties of the film towards the treated surface prevent the scratch from spreading. This facility of the protection called «self-healing» allows handling of the pieces even after a prolonged storage time, without loss of the protective value of the SOCOPAC 50S film.
- The dry film is intended to resist several years outside and above all to remain stable during this period. It does not suffer air-damage, by exposure to sun or to heat; it is not subjected to any cross linking or polymerisation and can be therefore removed several years after application as easily as the first day.
- Though it has a particularly pronounced hydrophobic quality, **SOCOPAC 50S** was not designed for the role of a specifically hydrophobic compound. However its capillary properties allow it to protect and repel water in an efficient way any material normally exposed to open air. In cases of humid, enclosed conditions, materials and parts exposed to wide differences in temperature, before protection it is necessary to apply a water-repellent compound such as WADIS 24, or SOCOPAC 25H where a total thickness greater than 50 microns is required, before the **SOCOPAC 50S** coating.

USES

On account of its formulation in accordance with the aerospace standards, the favourite application field of **SOCOPAC 50S** is **commercial** or **military aerospace**. It can be applied everywhere corrosion risks, caused by condensation or exposure to salt or corrosive air, require an efficient and controllable temporary protection : landing gear, closed compartments, cabin and toilet floors, load bay interiors, pipe-work, cables, guide rails of containers, etc...

In the railway industry, it is mainly used in hollow bodies, for the protection of rivets and bolts and for the protection of bogies.

DIRECTIONS FOR USE

SOCOPAC 50S is available in liquid to be applied by

- Dipping (it is recommended to dilute SOCOPAC 50S with HYSO 96/1 at a concentration of about 30 %).
- Brushing.
- Low pressure spray system, which allows optimisation of application and users' comfort (no mist during spraying, fine regulation of flow, absence of runs and fat edges). *Example* of low pressure application equipment: KREMLIN with M21 gun for flat surfaces, guns with fine nozzles and curved extensions at 45° and 135° for more difficult areas.
- Spraying (classic spray gun airless/airmix system, PREVAL sprayer)

SOCOPAC 50S is also available in aerosol and **AEROSOL EXTENDER 60cm** for application in cavities.

For a second layer, allow 2 hours before applying a new coat.

The operator must check that the deposited film is homogeneous and of the correct thickness. **SOCOPAC 50S** must be applied on clean and dry surfaces. When there is any doubt about the substrate humidity, it is better to apply **WADIS** or **SOCOPAC 25H**. After application of one of these water displacing compounds, leave to dry for 1 to 2 hours before applying the **SOCOPAC 50S** protection.

REMOVAL

SOCOPAC 50S can be removed in different ways depending on the equipment available and local conditions.

1. With cleaning solvents without water rinsing, use HYSO 96/1, or **DIESTONE DLS** or **DIESTONE D**, or better for accelerated drying: **SOCOSOLV 99/1**.
2. With SOCOSOLV A3582 (used undiluted at ambient temperature): apply the product by low pressure spraying or by dipping. Once the coating is impregnated, wash with water, preferably heated to 80° C (176° F). Recover the effluent from the lowest point by emptying or suction.
3. With a steam cleaning machine, set the temperature to over 80° C (176° F); some **HYSOMUL MC** (10 to 20 %) can be added.

TECHNICAL CHARACTERISTICS

Appearance	thixotropic liquid
Specific gravity	(at 20 °C/68 °F) 0.88
Flash point	(ISO 2592) 43 °C/109 °F
Viscosity cup ISO 2431-n°4	70 seconds
Colour	brown-red
Advised dry film thickness	25 to 100µ
Drying time (film of 25µ at 20°C/68°F) ... fast to handling: approximately 4 hours / total drying time: approximately 12 hours	
Film appearance	medium-hard, dry, wax-like
Film thickness by spraying	25 to 200µ
Film thickness by dipping	(diluted at 30%) 50 to 80µ
Film resistance to temperature	-55 °C to 150 °C (- 67 °F to + 302 °F)
Film resistance to humid tropical air ... on steel (chamber at 35 °C/95°F and 100 % humidity) : > 6 months	
Film resistance to alternated immersion into sea water ... on steel (AIR 0761/NFA 91411) : > 1000 hours (50µ)	
Film resistance to salt spray fog NF X 41002 ... on steel (XC18S) : 25 µ = > 500 hours ; 50 µ = > 1000 hours / on alloyed aluminium (2024) : > 1000 hours (50 µ)	
Estimated protection period	Up to 36 months indoor / Up to 12 months outdoor

PRECAUTIONS FOR USE AND STORAGE

SOCOPAC 50S is free from harmful, chlorinated or aromatic hydrocarbons, and is not flammable in normal conditions of use.

However, as for all hydrocarbon-based products, it is important to take the normal precautions for use and store away from flames and heat sources. Wear gloves during application and eye protection.

Store in the original closed containers, away from heat sources and flames. Always shake well before use.

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

For professional use only.

This technical data sheet replaces and cancels the previous one.

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