

BONDERITE S-MA 522 AERO

Known as TURCO Form Mask 522
June 2017

PRODUCT DESCRIPTION

BONDERITE S-MA 522 AERO provides the following product characteristics:

Technology	Protective coating
Product Type	Temporary protective coating
Application	Immersion, spray, manual

BONDERITE S-MA 522 AERO is a liquid plastic material forming a viscoplastic, strippable, extremely resistant non-porous film after curing.

BONDERITE S-MA 522 AERO has excellent chemical resistance characteristics and is resistant to semi-aqueous cleaners and alkaline and acidic baths, unless they contain strong oxidants.

BONDERITE S-MA 522 AERO protects valuable stainless steels against scratching and other mechanical damages even during further processing or transportation or storage.

Application Areas:

BONDERITE S-MA 522 AERO has its preferred areas of use in the stainless steel and light metal processing industry such as for the protection of bright and clad steel, aluminum, titanium, magnesium.

BONDERITE S-MA 522 AERO prevents mechanical damages during forming and metal bounding.

BONDERITE S-MA 522 AERO is well-suited as a covering varnish during chemical treatment processes of metal in alkaline and weakly acid solutions.

TECHNICAL DATA

Composition	Aromatic solvents synthetic rubber pigments
Appearance	olive gray
Odor	of aromatic compounds
Density at 20°C	approx. 1.0
Viscosity (Zahn cup no. 5)	approx. 35 sec
Yield	8 m ² /L
Flash Point, °C	6

Film Properties:

Tensile strength, kg/cm ²	approx. 85 kg
Strain	approx. 550 %
Film adhesion per cm ²	0.25 kg
Impact strength	excellent
Abrasion resistance	excellent

Not resistant against solvents.

DIRECTIONS FOR USE

Preliminary Statement:

Prior to use it is necessary to read the **Material Safety Data Sheet** for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed. Please also refer to the local safety instructions and contact Henkel for analytical support.

Instructions for Use:

BONDERITE S-MA 522 AERO can be processed with a brush, in an immersion or casting process or with the airless spraying method.

Prior to processing, BONDERITE S-MA 522 AERO must be stirred thoroughly taking care not to entrap air.

The surfaces to be treated must be clean, dry and grease-free.

An adjustable consistency for the individual processing methods can be carried out with a suitable thinning agent e.g. toluene or xylene (flash point under 21 °C).

In order to achieve a non-porous film which can easily be stripped later, BONDERITE S-MA 522 AERO must be applied in several layers.

The layer thickness of the dry film should be 125 to 200 µm.

Manual application:

For processing using a brush or a roller, BONDERITE S-MA 522 AERO must be thinned expediently with 10% with a suitable thinning agent e.g. toluene or xylene. Between the individual paint layers, ensure a drying time of at least 60 minutes.

Immersion or casting process:

The viscosity adjustment for the immersion and casting process and the selection of the thinning agent depend on the consistency of the parts to be coated and the methods of application.

Since during the immersion in film generating, liquid media, an outlet gusset develops, the part to be treated must be turned by 180° during the second immersion.

This process must be repeated until the required layer thickness has been achieved.

Each individual layer must dry well before the next immersion.

Spraying method:

The spraying order requires an airless spraying device. The spray viscosity is 17 to 18 seconds, measured within Zahn cup no. 5 and must be adjusted by adding a suitable thinning agent e.g. toluene or xylene.

Spraying pressure:

4 to 5 atm operating pressure
160 atm at the injector

BONDERITE S-MA 522 AERO is first applied crosswise in a covering manner. After a drying time of 10 minutes a double crosswise application is carried out, yielding a layer thickness of approx. 160 to 170 µm.

Drying:

BONDERITE S-MA 522 AERO is air-drying, and the surface dries very quickly.

Excessive heat exposure and suction affects the wet film and thus must be avoided.

In case of a multilayer application, it must be ensured that between the individual layers the specified drying time must always be observed.

After the final layer, BONDERITE S-MA 522 AERO must cure for at least 4 hours before stress can be put on the film.

The oven drying can be used to accelerate the workflow.

After the application of the final coat, BONDERITE S-MA 522 AERO must flash off for 15 to 20 minutes.

Afterwards, BONDERITE S-MA 522 AERO can be oven-dried for 30 minutes at temperatures of 80 to 100 °C.

Removal the coating:

The cured BONDERITE S-MA 522 AERO film can be pulled off by hand like a plastic sheet.

Storage:

Recommended Storage Temperature, °C	-10 to +35
Shelf-life, months (in unopened original packaging)	24

Classification:

Please refer to the corresponding **Material Safety Data**

Sheets for details on:

Hazards identification
Transport information
Regulatory information

ADDITIONAL INFORMATION

Disclaimer

Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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