



BONDERITE S-MA 537-42 AERO

Known as TURCO Form Mask 537-42
August 2013

PRODUCT DESCRIPTION

BONDERITE S-MA 537-42 AERO provides the following product characteristics:

Technology	Temporary protective coating
Product Type	Temporary protective coating
Application	Immersion and Spray

BONDERITE S-MA 537-42 AERO is a one-package hand strippable, protective coating, which possesses a high degree of chemical resistance. This product is an improved version of Turcoform Mask 537 and gives outstanding protection against corrosive action of hot alkaline and acid solutions and was specially developed for use in the Chem Mill process. This product incorporates the latest formulation improvements. These are, a high build-up capability (usually two dip applications will give up to 13 mils or 300 microns dry film thickness), a high bubble release capability; and easier flow detection made possible by a fluorescent film. It is conveniently packaged at ready-to-use viscosity for dip application.

Application Areas

BONDERITE S-MA 537-42 AERO is used in chemical milling process.

TECHNICAL DATA

Appearance	Viscous light green liquid
Density, kg/l	1.54
Soild content (120°C), %	20 to 24
Viscosity (Zahncup 20 °C)	38 to 42

DIRECTION OF 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.

Use instructions

1. Pre-cleaning:

The parts to be coated must be dry clean, free of corrosion,

dirt, oil and grease. Your HST sales Engineer can recommend suitable pre-cleaners based on your requirements.

2. Spray application:

2.1. Equipment: Hot airless spray equipment such as Graco, Nordson or Brinks may be used.

Example: Graco President 30:1 circulating unit with two 4 KW Spee-Flo heaters in series. Graco reflex gun with Graco 163-919 or -817 spray-tip alternatively a Spee-Flo gun can be used with 702-218 or -188 can be used. Further adequate compressed air volume at 6-8 bar is required for the pump set back pressure at 125-165 bar and the heater thermostat at 60-90°C.

2.2. Application Procedure: Hold the spray gun approximately 300-400 mm from the substrate moving the gun parallel and at right angles to the substrate surface. Use uniform straight strokes. Apply three box coats of which the first one is a little thinner with an over lap of 50-75%. The thickness will depend on the speed at which the spray gun is moved. Approximately 600-900 micrometer of wet film equates 200-300 micrometer dry film.

2.3. Cold Airless Spray: BONDERITE S-MA 537-42 AERO may be sprayed cold. However 5 box coats may be required to obtain the same dry film thickness. Hot spray allows application of heavier wet films without sagging than can be obtained with cold spray.

2.4. Dilution: BONDERITE S-MA 537-42 AERO is packaged ready to use. To assure uniform and reproducible results adequate mixing of the products is necessary and should be done at least once per 8-hour shift.

3. Dip Applications: Although BONDERITE S-MA 537-42 AERO contains anti-settling agents, proper circulation of the mask in the dip tank is recommended, to avoid dipping into run-off (drainage of excess mask) from previous parts.

- Use mask as received, but verify proper viscosity.
- Slowly immerse clean part into the mask, up to but not over the top edge of the part. Avoid dipping a part rapidly into the mask, as this introduces air and creates bubbles in the film. Remove part from dip tank.
- Allow part to dry until the film is tack free; rotate 180°; and recoat. Film build-up should be within the desired thickness now.

Using a dip application of the BONDERITE S-MA 537-42 AERO has several advantages over spray applications. A dip coating in general contains more solids and less solvent and is subsequently less expensive per covered surface of metal.



Storage

Temperature, °C 0 to 40
Shelf-life (in unopened original packaging), months 24

Classification

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

Sheets for details on:

Hazardous Information
Transport Regulations
Safety Regulations

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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:

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. 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.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada Corporation, the following disclaimer is applicable:

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage

Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 0.0