

**BONDERITE**<sup>®</sup>**BONDERITE S-MA 537-42 HT**Known as TURCO Form Mask 537-42 HT  
August 2013**PRODUCT DESCRIPTION**

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

<b>Technology</b>	Temporary protective coating
<b>Product Type</b>	Temporary protective coating
<b>Application</b>	Immersion and Spray

BONDERITE S-MA 537-42 HT is a one-package-hand-strippable, protective coating, which possesses a high degree of chemical resistance, especially developed for acid etchants. The build-up capability (usually three dip applications will give up to 10 mills or 230 microns dry film thickness), a high bubble release capability, and easier flaw 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 HT is used in chemical milling process. Especially designed for a acid etchants.

**TECHNICAL DATA**

Appearance	Viscous red liquid
Density, kg/l	1.51
Sold content (120°C), %	23.6 to 24.6
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 HT 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 HT 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 HT 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.

- a. Use mask as received, but verify proper viscosity.
- b. 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.
- c. 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 HT 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.

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