

# BONDERITE M-NT 40042

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## PRODUCT DESCRIPTION

BONDERITE M-NT 40042 provides the following product characteristics:

<b>Technology</b>	Surface treatment
<b>Product Type</b>	Conversion coating
<b>Application</b>	Steel, galvanised steel and aluminium
<b>Process components:</b>	BONDERITE M-NT 40042 BONDERITE C-AD 0508 BONDERITE M-AD 700

BONDERITE M-NT 40042 is a liquid innovative product set up for treatment of ferrous material, aluminium, zinc and alloys.

BONDERITE M-NT 40042 creates a very adhering zirconium based conversion layer which is an excellent anchorage base for liquid, powdered or electrophoretic paints.

BONDERITE M-NT 40042 is a valid alternative to standard phosphor-degreasing treatments as it improves the corrosion resistance performances of painted materials using a phosphate content 20 to 100 times lower.

For an optimum treatment cycle we advise to arrange a subsequent rinse with continuous partial renewal and if possible a final rinse with demineralised water. Final results are further improved when combined with a suitable passivation.

## 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.

### Application:

BONDERITE M-NT 40042 is used as pre-painting treatment on pieces destined to automotive industry, appliances, metal furniture and plate articles in general quite exposed to corrosive agents attack (moisture, atmospheric agents, etc.).

When used in cycles where a preliminary cleaning stage is not present, BONDERITE M-NT 40042 must be combined with BONDERITE C-AD 0508 (detergent additive with protective action).

BONDERITE M-NT 40042 is used on spray or dip systems with two or more steps, according to following operating parameters:

	SPRAY	IMMERSION
BONDERITE M-NT 40042	5 to 15 g/L (kg/1,000 L)	7 to 35 g/L (kg/ 1,000 L)
BONDERITE C-AD 0508	0.5 to 5 g/L (kg/1,000 L)	1 to 5 g/L (kg/ 1,000 L)
pH	4.5 to 5.5 (opt. 4.8 to 5.2)	4.5 to 5.5 (opt. 4.8 to 5.2)
Temperature*	45 to 65 °C	45 to 65 °C
Treatment time	1 to 3 min	1 to 6 min
Pressure	1 to 2 atm	---

\*Room temperature is possible when a preliminary cleaning step is present.

### Bath Make-up:

1. Fill the operating tank with clean tap water to  $\frac{3}{4}$  of the final volume.
2. Start the circulation pumps and heat up to the working temperature.
3. According to the type of application (spray or dip), add the set amounts of BONDERITE M-NT 40042 and BONDERITE C-AD 0508 (if required).
4. Bring the solution to the right volume and to the working temperature, let it recirculate for 15 to 20 min.
5. Make the final controls.

### Bath Control:

#### pH determination:

Cool the sample of solution (about 100 mL) to about 20 °C. Determine pH value, preferably using a pHmeter previously set on pH values 4 and 7 (use of a fluoride ion resistant electrode is recommended).

During the make-up pH value can change according to the type of water used. Use BONDERITE M-AD 700 to increase it if necessary.

### Replenishment:

Bath is replenished with BONDERITE M-NT 40042 and BONDERITE C-AD 0508 (when required) according to pH value. Automatic dosage with Henkel Lineguard is preferable.

### Caution:

In case of oil accumulation on the bath surface, it is recommended to make a partial skimming in order to avoid contamination of treated material.

Tanks and other plant parts should be preferably made of stainless steel (AISI 304).

Slight differences in the product appearance do not affect its efficiency nor operating performances.

**Classification:**

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

**Sheets** for details on:

**Hazards identification**

**Transport information**

**Regulatory information**

**Storage:**

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

**ADDITIONAL INFORMATION****Disclaimer**

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