

## BONDERITE M-AD NI-1

November 2017

### PRODUCT DESCRIPTION

BONDERITE M-AD NI-1 provides the following product characteristics:

<b>Technology</b>	Metal Pretreatment
<b>Product Type</b>	Additive
<b>Application</b>	Zinc phosphating baths

BONDERITE M-AD NI-1 is a liquid product to increase the nickel content in zincphosphating baths.

### TECHNICAL DATA

Composition:	inorganic salts, inorganic acid, water
Appearance:	green liquid
Density:	~ 1.5 g/cm <sup>3</sup>
pH-Value:	acidic

### 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-AD NI-1 is used to increase the nickel content in zinc phosphate baths.

To increase the nickel content 0.1 g/L add to the 1,000 L bath:

BONDERITE M-AD NI-1                      1.1 kg = 0.75 L

With this addition the "Free Acid" increases 0.06 points and the "Total Acid" 0.64 points.

With this increased "Total Acid" it has to be worked continuously and should not be lowered by reducing dosing of BONDERITE Replenisher, otherwise the ingredients of the bath reduce.

#### Caution:

The product is corrosive; it contains approx. 5 % phosphoric acid!

#### Waste Water Treatment:

Waste water neutralization, if needed. The waste water treatment must meet the requirements of the local water authorities.

#### Storage:

Recommended Storage Temperature	-20 to 50°C
Shelf-life, months (in unopened original packaging)	36

#### Classification:

Please refer to the corresponding **Material Safety Data Sheets** for details on:

**Hazards identification**  
**Transport information**  
**Regulatory information**

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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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