

## BONDERITE M-AD MN-2

Known as Granodine Starter 12/ Additive Mn-2  
February 2017

### PRODUCT DESCRIPTION

BONDERITE M-AD MN-2 provides the following product characteristics:

<b>Technology</b>	Metal Pre-Treatment
<b>Product Type</b>	Additive
<b>Application</b>	Zinc phosphating baths

BONDERITE M-AD MN-2 is a liquid product to increase the manganese content in zinc phosphate baths. It also contains nitrate.

### TECHNICAL DATA

Composition	inorganic salts, inorganic acid, water
Appearance	light pink liquid
Density:	~ 1.6 g/cm <sup>3</sup>
pH:	acidic (3.3 by a 1% solution)

### 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 MN-2 is used to increase the manganese content in zinc phosphate baths.

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

BONDERITE M-AD MN-2            0.7 kg = 0.43 L

#### Classification:

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

**Sheets** for details on:

**Hazards identification**

**Transport information**

**Regulatory information**

#### Storage:

Recommended Storage Temperature            0 to 50°C

Shelf-life, months                                    36

(in unopened original packaging)

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