

# **BONDERITE M-AD 315**

December 2016

#### **PRODUCT DESCRIPTION**

BONDERITE M-AD 315 provides the following product characteristics:

Technology	Metal Pretreatment
Product Type	Additive for zinc phosphating baths
	phosphating baths
Application	Immersion or spray

#### **Application Areas:**

BONDERITE M-AD 315 is a liquid product to increase the silicofluoride content in zincphosphating baths.

### **TECHNICAL DATA**

Appearance	colourless solution
Density, g/cm <sup>3</sup>	1.07
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 315 can be used to increase the silicofluoride content in zincphosphating baths.

To increase the silicofluoride content 0.1 g/L add to each 1,000 L of bath volume:

**BONDERITE M-AD 315** 1.46 kg = 1.36 l

With this addition of the free fluoride content, free acid and total acid will increase.

#### Storage:

Recommended Storage Temperature, °C	-10 to 40
Shelf-life, months	36
(in unopened original packaging)	

#### **Classification:**

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

Hazards identification Transport information

**Regulatory information** 

Henkel AG & Co. KGaA 40191 Düsseldorf, Germany Phone: +49-211-797-0

Henkel Coorporation USA Madison Heights, MI 48071 Phone: +1-248-583-9300

Henkel (China) Co. Ltd. 201203 Shanghai, China Phone: +86.21.2891.8000



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.

ADDITIONAL INFORMATION

Disclaimer

Note:

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 and/or registered trademarks of Henkel and its affiliates in the U.S. and elsewhere.

Reference 0.0

For more information, please contact us on www.henkel.com