

BONDERITE M-PT 2150 RR

Known as Aquence 2150 Reaction Rinse

June 2017

PRODUCT DESCRIPTION

BONDERITE M-PT 2150 RR provides the following product characteristics:

Technology	Metal Pre-Treatment
Product Type	Passivating agent
Application	Immersion or Spray

BONDERITE M-PT 2150 RR is a liquid product improving the water resistance, corrosion resistance and adhesive properties of the dried BONDERITE M-PP coating.

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.

Bath Make-up:

For each 1,000 L of bath volume add:

BONDERITE M-PT 2150 RR 10 to 30 L

Operating Parameters and Bath Control:

Conductivity: 1,000 to 3,000 µm
Temperature: room temperature to 27 °C
Time: 1 min

Process Sequences:

In general, the process sequence includes the following steps:

1. Cleaning
2. Rinsing with tap water
3. Rinsing with demineralized water
4. Coating with BONDERITE M-PP
5. Rinsing with tap water
6. Treatment with BONDERITE M-PT 2150 RR
7. Drying

Process Stages Prior to the Reaction Rinse:

The BONDERITE M-PT 2150 RR is carried out after a rinse with water, which again is carried out after the coating with BONDERITE.

A complete BONDERITE product range is available. Our technical customer service will suggest the selection of suitable chemicals (details on BONDERITE coating systems can be found in the respective operating instructions). In

order to prevent a severe contamination of the reaction rinse resulting from the coating bath, a sufficient intermediate rinsing is required.

Treatment with BONDERITE M-PT 2150 RR processing solution:

Reaction rinse:

Make-up:

Three quarters of the tank are filled with fully demineralized water, BONDERITE M-PT 2150 RR is added followed by fully demineralized water up to the working level. Afterwards, mix well.

Working conditions:

Immersion time: 1 min
Temperature: room temperature to 27°C

At temperatures clearly exceeding 27 °C, the efficiency is limited. Should the working temperatures constantly exceed 27 °C, it is recommended to use a refrigeration unit in the process tank.

Bath Monitoring and determination methods:

Note:

Always use a Peleus ball for pipetting!

Conductivity value:

1. The conductivity of the BONDERITE M-PT 2150 RR is determined according to the operating instructions of the available conductivity meter and the reading recorded (value a).
2. Take a 50 mL bath sample with a measuring cylinder.
3. The bath solution is poured into a 250 mL Erlenmeyer flask; then, several glass boiling chips are added.
4. On a heating plate, heat them to a boil and then boil for 15 minutes.
5. Cool down the solution and transfer into a measuring cylinder. The Erlenmeyer flask is rinsed several times with small amounts of demineralized water, always pouring the rinse water into the measuring cylinder.
6. Afterwards, fill the Erlenmeyer flask to the 50 mL mark with demineralized water.
7. The conductivity of this solution is determined (value g).
8. The conductivity value - g - corresponds to the contamination level of the working solution.
9. The value found under "g" is subtracted from the previously determined value "a".

Conductivity range: 1,000 to 3,000 µS

In order to increase the conductivity value by 100 µS per

1,000 L bath solution 1 L BONDERITE M-PT 2150 RR is added.

Post Treatment:

Curing of the coating:

The curing is carried out according to the specifications of the operating instructions for the process concerning the BONDERITE M-PP series.

Plant Material:

Suitable package materials for the BONDERITE M-PT 2150 RR reaction rinse are stainless steel, PVC, Polypropylene or structural steel with a lining or coating; for pumps and pipes stainless steel of material no. 1.4301.

General Maintenance:

A periodic make-up or a continuous overflowing of the reaction rinse are recommended. Usually, contamination occurs by a drag-in from the upstream process stages. With an increased accumulation, contamination has a negative effect. In accordance with the local plant conditions, our employee advises on the frequency of the new formulation or the required flooding rate.

General Remarks:

For regulations regarding the disposal (neutralization) of used baths, refer to the instructions concerning the wastewater treatment.

Bath Analysis:

Apparatus and reagents:

2 Erlenmeyer flasks 250 mL
1 package boiling chips
2 measuring cylinders 50 mL
1 heating plate

Supplier:

The aforementioned devices and reagents can be obtained via general dealers for chemicals or laboratory equipment.

Storage:

A cool storage in enclosed space is recommended.

BONDERITE M-PT 2150 RR freezes at 0°C; freezing is not harmful to the product.

The product should be protected against high temperatures such as direct solar radiation, in order to prevent an inflation of the package.

Under respective storage conditions, the storage stability of BONDERITE M-PT 2150 RR is unlimited; however, with a very long storage period, the effectiveness of the product may decrease.

Frequent opening or a failure to close the package may also decrease the level of effectiveness.

In such cases, an increased concentration of BONDERITE M-PT 2150 RR is required, in order to correct the conductivity of the working solution.

Classification:

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

Hazards identification
Transport information
Regulatory information

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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