BONDERITE

Technical Data Sheet

BONDERITE M-AC 5020 B

Known as Fixodine C 5020 B

February 2016

PRODUCT DESCRIPTION

The BONDERITE M-AC 5020 Process provides the following product characteristics:

Technology	Metal Pretreatment
Product Type	Activation product for manganese phosphating process
Application	Immersion
Process components:	BONDERITE M-AC 5020 A BONDERITE M-AC 5020 B

BONDERITE M-AC 5020 consists of two powder components and is used in the pre-rinse of manganese phosphating processes.
Following a strong alkaline cleaning or pickling in mineral acids this pre-rinse prepares the surface to generate uniform and fine crystalline manganese phosphate coatings on iron and steel.

TECHNICAL DATA

pH-value	7.0 to 9.0
Temperature, °C	20 to 40
Immersion time, min	1 to 2

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 1,000 L:
Three quarters of the bath is filled with water. Then add whilst thoroughly circulating:

BONDERITE M-AC 5020 A	1 to 3 kg
BONDERITE M-AC 5020 B	1 to 3 kg

Note:
It is reasonable to first moisten BONDERITE M-AC 5020 A with water and to pre-disolve BONDERITE M-AC 5020 B in hot water.

Process Description:
1. Cleaning / Pickling
2. Rinsing
3. Pre-rinse with BONDERITE M-AC 5020
4. Phosphating with BONDERITE M-MN (Thermoil Granodine)
5. Rinsing
6. Post-treatment

1. Cleaning/ Pickling:

For cleaning and degreasing we recommend the use of suitable products from our BONDERITE range. To remove rust and scale the material must be pickled. Suitable for pickling are mineral acids that contain an Inhibitor. For details on the application of our BONDERITE inhibitors please refer to the respective Technical Data Sheets.

2. Rinsing

After cleaning/pickling the treated parts have to be rinsed with water. The rinsing bath must be continuously fed with fresh water and be equipped with an overflow device.

3. Pre-rinse with BONDERITE M-AC 5020:

The pre-rinse bath must be equipped with a high revolution stirrer to guarantee a thorough circulation of the BONDERITE suspension. The efficiency of the pre-rinse will go down if BONDERITE M-AC 5020 A precipitates on the bath floor. It is necessary to continuously circulate the suspension even during breaks or at night.

4. Phosphating with BONDERITE M-MN (Thermoil Granodine)

For manganese phosphating a suitable BONDERITE M-MN process is applied. Details on the application can be found in the Technical Data Sheet.

5. Rinsing

The rinsing bath must be continuously fed with fresh water and be equipped with an overflow device.

6. Post-treatment:

The post-treatment is usually performed in a watery passivation solution or the parts are oiled with a corrosion protection emulsion or a corrosion protection oil.

Bath Control:
The BONDERITE M-AC 5020-Bath is controlled by the pH-value.

Determination and Adjustment of the pH-value:

Specified range:	pH 7 to 9

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Note:
In certain intervals the BONDERITE pre-rinse will loose it's activating and crystal improving character due to drag-in of alkalines or acids.
If the manganese phosphate layers are to thick or coarsely crystalline the pre-rinse bath can be replenished with:

1 kg BONDERITE M-AC 5020 A and
1 kg BONDERITE M-AC 5020 B

for every 1,000 litres of bath solution.

If this is not sufficient the foreign salt contamination level could be too high. A new bath make-up is reasonable.

Classification:
Please refer to the corresponding **Material Safety Data Sheets** for details on:
Hazards identification
Transport information
Regulatory information

Storage:

Recommended Storage Temperature, °C	-10 to 40
Shelf life, months (in unopened original packaging)	24

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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