

BONDERITE® M-NT 1820 R1

May 2025

Product description

BONDERITE® M-NT 1820 R1 provides the following product characteristics:

Technology	Metal pretreatment
Product type	Replenisher for pretreatment processes
Application	Immersion or spray process

BONDERITE® M-NT 1820 is a phosphate-free pre-treatment process for the conversion pre-treatment of galvanized steel, steel and aluminum. BONDERITE® M-NT 1820 R1 is a liquid replenisher for the process.

Application areas

BONDERITE® M-NT 1820 R1 is used in spray- and spray/immersion processes. It's a liquid replenisher for the process. BONDERITE® M-NT 1820 R1 is used to increase the content A and content B in conversion pre-treatment processes.

Directions for use

Preliminary statement

Prior to use it is necessary to read the **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 replenishment

To increase the content A by 0.1 point, add to the 1,000 L bath

BONDERITE® M-NT 1820 R1, kg 2.05

and it will also increase content B by 0.015 point.

Consult our representative as to the correct rate of addition prior to using.

Determination of content A

Photometer: WTW pHotoFlex
Cuvette/vessel: Diameter 28 mm

Method-No.: 908

Before the insertion into the photometer, cuvettes/vessels need to be closed tightly. Otherwise the operator and/or the photometer may be harmed.

WTW pHotoFlex preparation

- Turn on the device.
- Select "Photometry" and confirm with "ENTER".
- Select program 908 (Press button "PROG" and determine the measurement method with the numeric input, then confirm with "ENTER").
- For zero calibration, fill the 28 mm cuvette with demineralized water and follow the instructions on the photometer's display.
- Execute the measurement.

Sample preparation

- Pipette 50 mL Reagent 908-1 into a 100 mL beaker.
- Add 200 µL filtered bath sample to the beaker (use an accurate pipette) and mix the solution gently.
- Add 2 mL Reagent 908-2 and mix the solution gently.
- Decant the mixture into a 28 mm cuvette and start the measurement (remark: the volume is not specified, just make sure that enough solution to decanted to cover the light beam of the photometer).

Determination of content B

Photometer: WTW pHotoFlex
Cuvette/vessel: Diameter 28 mm

Method-No.: 912

Before the insertion into the photometer, cuvettes/vessels need to be closed tightly. Otherwise the operator and/or the photometer may be harmed.

WTW pHotoFlex preparation

- Turn on the device.
- Select "Photometry" and confirm with "ENTER".
- Select program 912 (Press button "PROG" and determine the measurement method with the numeric input, then confirm with "ENTER").
- For zero calibration, fill the 28 mm cuvette with demineralized water and follow the instructions on the photometer's display.
- Execute the measurement.

Sample preparation

- Pipette 1.0 mL filtered bath sample into the cuvette/vessel.
- Add 9.0 mL demineralized water.
- Add one spoonful of Reagent 912-1 and mix the solution gently.
- Add one spoonful of Reagent 912-2 and mix the solution gently, until the reagents are completely dissolved.
- Wait 3 min.
- Add 0.5 mL Reagent 912-3 and mix the solution gently; then start the measurement.

Special remarks

Containers for the BONDERITE® M-NT 1820 R1, and the bath containers, spraying systems, pumps and heating facilities for the BONDERITE® M-NT 1820 bath should be made of fluoride resistant material. The waste water treatment and disposal must comply with the local discharge regulation.

Attention

BONDERITE® M-NT 1820 R1 contains complex fluoro compounds. Watch safety precautions! Shield eyes with tightly fitting safety glasses, wear rubber gloves and chemical resistant safety clothes! Avoid contact with skin! Do not inhale vapours! Work in a well ventilated place.

Classification

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

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

Storage

Recommended storage temperature, °C	5 to 40
Shelf life (in unopened original packaging), months	6

BONDERITE® M-NT 1820 R1 may precipitate if stored at temperatures below 5°C or above 40°C.

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