

BONDERITE M-NT 5700

Known as Alodine 5700
May 2021

PRODUCT DESCRIPTION

BONDERITE M-NT 5700 provides the following product characteristics:

Technology	Metal Pretreatment
Product Type	Coating
Application	Conversion coating
Process Components:	BONDERITE M-NT 5700 BONDERITE M-AD 252 BONDERITE M-AD 700

BONDERITE M-NT 5700 treatment is a chromium free product and specifically formulated for treating aluminum and its alloys. Mixed with water it produces colorless or bluish/yellowish conversion layers on aluminum and its alloys. These provide very good corrosion resistance as well as excellent adhesion properties for a subsequent painting.

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:

BONDERITE M-NT 5700 is operated as ready-to-use product, therefore not requiring any in-plant dilution.

Operating Parameters:

Concentration range, points	7.1
Temperature, °C	20 to 50
Time, min	1 to 5
pH	2.6 to 3.8

Changes in the following process parameters may be necessary and depend on local conditions.

Process Sequence:

The complete process sequence normally consists of the following steps:

1. Cleaning
2. Water rinse
3. Treatment with BONDERITE M-NT 5700
4. DI-water rinse
5. Drying

Bath Control:

BONDERITE M-NT 5700 solution is controlled by the following analyses:

Titration of BONDERITE M-NT 5700-points:

- Pipet 5 mL 0.1 N KMnO₄-solution into a beaker, add 20 mL DI-water and 25 mL 25 % H₂SO₄.
- Titrate with the bath until the solution will turn yellow/colorless.
- The consumption of bath solution indicates the concentration of BONDERITE M-NT 5700.

pH control:

- Adjust the pH-meter to pH 4.0 to 7.0 using the calibration solutions.
- Place electrodes into the sample solution and read pH value.
- To decrease pH add BONDERITE M-AD 252, to increase pH add BONDERITE M-AD 700.

General Recommendation:

The bath containers for the BONDERITE M-NT 5700 bath can be made of hard PVC (without softening agents) or stainless steel 1.4571 or 1.4301.

A different possibility would be the use of a steel container which has been lined with a fluoride resistant plastic.

Racks, hooks and baskets should be made from aluminum, austenitic steel or plastic (hard PVC).

The spraying systems, pumps and heating facilities should be made of stainless steel (1.4571 or 1.4301).

BONDERITE M-NT 5700 baths must be detoxified and neutralized before adding them to the normal waste water.

Caution:

BONDERITE M-NT 5700 contains fluorotitanic acid!

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!

Read the safety information on the product label!

Equipment:

50 mL graduated cylinder (2)
 1 mL pipet
 200 mL wide-necked-Erlenmeyer flask (2)
 50 mL burette (2)
 deionized water
 pH-buffer 3
 pH-buffer 7
 0.1 N - sodium hydroxide
 0.1 N - potassium permanganate
 25 % - sulfuric acid
 pH-meter

Classification:

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

Sheets for details on:

Hazards identification
Transport information
Regulatory information

Storage:

Recommended Storage Temperature, °C	0 to 40
Shelf-life, months	12

ADDITIONAL INFORMATION**Disclaimer**

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