

BONDERITE M-NT 4830

Known as Alodine 4830

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PRODUCT DESCRIPTION

The BONDERITE M-NT 4830 Process provides the following product characteristics:

Technology	Surface treatment
Product Type	Conversion coating
Application	Aluminium
Process Components:	BONDERITE M-NT 4830 BONDERITE M-NT 4831 BONDERITE M-NT 4830 R

The spray process based on BONDERITE M-NT 4830 and BONDERITE M-NT 4831 produces a chromium-free, conversion layers on aluminium and its alloys. Depending on the working condition, on the Aluminium Alloy and on the conversion layer thickness, the colour of the converted surfaces ranges from colourless to slight iridescent. The conversion layer provides a corrosion resistance as well as very good adhesion properties for subsequent painting.

BONDERITE M-NT 4830/4831 is used by dip, spray or by cascade with or without rinse.

BONDERITE M-NT 4830/4831 is approved by Qualicoat and GSB.

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.

Process Description:

The best operational schedule for treatments with BONDERITE M-NT 4830/ 4831 is composed as follows:

1. Alkaline or acid etching
2. Rinsing
3. Acid Deoxidizing
4. Rinsing
5. Rinse with DI-Water (max 50 microS/cm)
6. Conversion treatment with BONDERITE M-NT 4830/4831
7. Optional: Rinse, Humidifying nozzles (with DI water) or air blowing nozzles
8. Drying

Bath Make-up:

- Fill the conversion tank to $\frac{3}{4}$ of the operating volume with DI water.
- Start up the recirculation pump and for each 1,000 L of bath add the following chemical.

BONDERITE M-NT 4830	1.5 to 3.0 kg
BONDERITE M-NT 4831	3 to 6 kg

- Fill up the tank with DI water Heat up to the operating temperature, and, after homogenisation make the controls.

Application:

The process works according the following average parameters; possible changes could be necessary depending on local conditions.

Pointage:	2 to 7
pH	2.2 to 3
Temperature, °C	20 to 40
Time, sec	10 to 120
Pressure, bar	0.5 to 1.5

Bath Control:

The BONDERITE M-NT 4830/4831-bath is controlled by determination of the Pointage.

- Pipette 100 mL of the bath into a 250 mL Erlenmeyer-flask.
- Add 5 drops of Bromophenol Blue Indicator.
- Titrate with 0.1 N NaOH solution until colour change from yellow to blue.

The number of 0.1 N NaOH mL used for the titration is the pointage value.

Replenishing:

For each missing point and for each 1,000 L bath add 0.4 kg of BONDERITE M-NT 4830 R.

Advices:

Tanks and all relevant accessories (risers, nozzles, pumps, etc.) should be made of stainless steel.

Small differences in product aspect do not affect its performances.

The bath surface has to be kept free from oil or organic pollutants, through periodical skimming.

Storage:

Recommended Storage Temperature, °C	0 to 40
Shelf-life, months (in unopened original packaging)	36

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. 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.

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