

**BONDERITE M-ED 12005**

May 2021

**PRODUCT DESCRIPTION**

BONDERITE M-ED 12005 provides the following product characteristics:

<b>Technology</b>	Metal Treatment
<b>Product Type</b>	Electrolytic Colouring
<b>Application</b>	Aluminium

BONDERITE M-ED 12005 is an oxidizing product, supplied as powder and of dark violet color.

**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.

**Application:**

BONDERITE M-ED 12005 is used for the make-up and the maintenance of electrocoloring bath for gold shades of Aluminum anodized.

BONDERITE M-ED 12005 is used together with sulphuric acid in the formation and maintenance of baths.

BONDERITE M-ED 12005 allows to obtain the whole range of shades of electrolytic gold.

**Bath make-up:**

The operative conditions of gold electrocoloring bath are maintained in the following range concentrations:

BONDERITE M-ED 12005	22 to 25 g/L
Sulphuric acid	7 to 14 g/L

The bath make-up is done adding 23 g/L BONDERITE M-ED 12005 and 8 g/L sulphuric acid in water.

It is recommended to keep the temperature of electrocoloring bath between 18 and 25°C.

**Bath Control:**

The amount of BONDERITE M-ED 12005 of coloring bath is controlled using the following method:

- Take 25 mL of Oxalic acid 0.1N solution.
- Add 10 mL of sulphuric acid 25%.
- Heat until 50°C and titrate with the coloring bath until the pink color remains for about 15 seconds.
- Let V be the mL of bath consumed in the titration.

Concentration in g/L of BONDERITE M-ED 12005 =  $270 / V$

The sulphuric acid concentration is determined using the following method:

- Take 50 mL of bath in a beaker.
- Add 50 mL of DI water and titrate with 1N NaOH until the pH 2.1 using a pH-meter.

mL of sodium hydroxide 1N x 0.98 = g/L sulphuric acid

**Classification:**

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

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

**Storage:**

Recommended Storage Temperature	-20 to 50°C
Shelf-life, months	36

Keep away from the sun light.

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