



# **ALBOND CL™**

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- **Superior adhesion power.**
- **Ideal for deep recesses and complex parts.**
- **Multi-alloy formulation.**
- **Contains no cyanide.**
- **Use on all aluminum alloys.**
- **Can be easily controlled by analysis.**
- **Easy and economical to use.**

## **SUPER BONDING ZINCATE FOR ALUMINUM**

**ALBOND CL** is a superior dilute zincate bonding process for aluminum and aluminum alloys. It is formulated to produce a unique, dense zincate deposit on a wide variety of aluminum alloys, with outstanding performance on highly specialized applications such as tooling, wheel manufacturing and memory disc applications.

**ALBOND CL**, unlike conventional zincates, assures maximum adhesion of subsequent metal deposits, electroless or electrodeposited. In some cases, it enables many different deposits to be applied directly without a copper strike and still maintain maximum adhesion.

**ALBOND CL** is maintained by the use of **ALBOND CL ZINCATE CONCENTRATE**. The bath produces a dilute zincate that facilitates rinsing, thus minimizing drag-in into downline plating baths. It substantially reduces rejects and in combination with its long life, makes the process very economical.

# OPERATING DATA

<b>ALBOND CL</b>	<u>Range</u> <b>20-50%/ vol.</b>	<u>Typical</u> <b>25%/vol</b>
Temperature		60 - 115° F. (15-45° C)
Time		15-120 sec.

## PRODUCT NOTES

- Parts should have a uniform dull, gray appearance. If film becomes patchy, cleaning or activation steps should be checked.
- Specific plating cycles vary due to alloy and from installation. Your **A BRITE REPRESENTATIVE** or the **A BRITE TECHNICAL SERVICE LABORATORY** can recommend the proper cleaners and processing cycle for your specific application.
- Zincate is used at room temperature, however, heating shortens immersion time and may improve adhesion on difficult alloys.
- One gallon of **ALBOND CL** operating solution will treat about 300<sup>ft</sup><sup>2</sup> of aluminum.
- These variables will affect the performance and appearance of the bath: concentration, temperature, time, load size, age of solution, alloy & finish of base metal and pre-treatment.
- A double zincate cycle is recommended, with the second zincate time very short typically around 20 seconds.
- Immersion times depend on bath condition and temperature. If part reacts violently with the zincate, then immersion times should be short. If no visible reaction is evident then immersion times can be extended.

## SOLUTION CONTROL

### Analytical

- 1) 5 ml sample into 250 ml Erlenmeyer flask.
- 2) Add 40 ml of 50% Triethanolamine.
- 3) Add 25 ml of Ammonium Hydroxide Chloride Buffer.
- 4) Add 50 ml of distilled water.
- 5) Add 0.2 gram of Eriochrome Black T indicator.
- 6) Titrate with 0.0575 M EDTA to a blue color.

**Calculation:** ML of 0.0575M EDTA x 1.16 = percent /volume **ALBOND CL**.

## EQUIPMENT

PVC, Koroseal, lined steel, polypropylene, or polyethylene are suitable. Stainless steel heaters or plate coils are satisfactory. Filtration is recommended.

## STORAGE/HANDLING

Store in a cool dry area. Material has an excellent shelf life. The use of **ALBOND CL** solutions requires the handling of highly alkaline materials. Avoid contact with skin and eyes. Wear proper protective clothing, rubber boots, apron, gloves and face shield. **Refer to the Material Safety Data Sheet for more complete information before using this product.**

## WARRANTY

The information presented herein, while not guaranteed, is to the best of our knowledge, true and accurate. No warranty or guarantee, expressed or implied is made regarding the performance of any products, since the manner of use is beyond our control. No suggestion for product use nor anything contained herein, shall be construed as a recommendation for its use in infringement of any existing patent, and we assume no responsibility or liability for operations which do infringe any such patents. The above includes confidential and proprietary information of **A BRITE** and is furnished to you for your use solely on products or processes supplied to you by us.