

## BONDERITE® C-AK 212

Known as Ridoline 212  
May 2022

### PRODUCT DESCRIPTION

BONDERITE® C-AK 212 provides the following product characteristics:

<b>Technology</b>	Industrial Cleaner
<b>Product Type</b>	Alkaline Cleaner
<b>Application</b>	Parts Cleaning

BONDERITE® C-AK 212 is a concentrated, liquid, silicate-free, mildly alkaline cleaner designed to remove oils and light oxide films from aluminum and its alloys. It contains wetting agents that are easily rinsed from the metal surface and will not emulsify oils unless the oils themselves contain emulsifiers. BONDERITE® C-AK 212 is a low etching cleaner that will effectively remove polishing compounds without adversely affecting the appearance of the polished aluminum surface. Increases in temperature or reductions in concentration can produce a greater etching effect.

### 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:

Bath Preparation per 100 Gallons:  
BONDERITE® C-AK 212, gallons 4 to 15

- Fill about ¾ of the tank with clean tap water.
- Heat to 100° Fahrenheit while recirculating or stirring, add 4 to 15 gallons of BONDERITE® C-AK 212 for every 100 gallons of final solution volume.
- Mix until uniform.
- Add sufficient water to bring the solution up to the working level and then heat to the operating temperature.
- The low end of the concentration is generally used for pressure spraying applications.
- The upper end of the concentration range is used for immersion applications.

#### Operating Data:

Adjusting the following parameters could be necessary depending on the line conditions.

Total alkalinity	10.4 to 39 points (mL)
Free alkalinity	3.6 to 13.5 points (mL)
Temperature	
Spray:	120 to 185° Fahrenheit
Immersion:	100 to 160° Fahrenheit
Time	
Spray:	1 to 5 minutes
Immersion:	3 to 15 minutes

**Bath Control:**

Never pipet by mouth, use a pipet filler.

BONDERITE® C-AK 212 bath can be controlled by a Total Alkali (TA) or Free Alkali (FA) titration. In locations where soil loading is high, a Free Alkali (FA) titration may be better suited. Additionally, the TA/FA ratio can be useful for predicting bath life.

Total Alkali:

- Pipet a 10 mL sample into a 250-mL Erlenmeyer flask.
- Add approximately 75 mL of deionized water and 4 to 6 drops of Indicator 4.
- Titrate with Titrating Solution 61 until the sample changes from yellow to orange.
- The mL of Titrating Solution 61 used is the total alkali value in points.

Total alkali range: 10.4 to 39.0 points (mL)

To increase value 1.0 point: 0.38 gallon (about 1.5 quarts) of BONDERITE® C-AK 212 per 100 gallons of solution volume.

Free Alkali:

- Pipet a 10 mL sample into a 250-mL Erlenmeyer flask.
- Add approximately 75 mL of deionized water and 5 drops of Indicator 3.
- Titrate with Titrating Solution 61 until the sample changes from pink to clear.

Free alkali range: 3.6 to 13.15 points (mL)

To increase value 1.0 point: 1.3 gallon of BONDERITE® C-AK212 per 100 gallons of solution volume.

Total Alkali/Free Alkali Ratio:

- The TA/FA Ratio can be used to predict bath life.
- A new BONDERITE® C-AK 212 bath has a TA/FA Ratio of approximately 1 to 3.
- Typically when the TA/FA Ratio doubles to 1 to 6, it is time to change the solution.
- This value is only a guide, and the actual control ratio should be determined for each process line.

**Waste Water Treatment:**

Applicable regulations covering disposal and discharge of chemical should be consulted and followed. Disposal information for BONDERITE C-AK 212 is given on the Material Safety Data Sheet.

**Classification:**

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

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

**Storage:**

Recommended Storage Temperature	5 to 40°C
Shelf-life, months	60

BONDERITE® C-AK 212 is a liquid chemical which must be protected from freezing. Opened containers should be kept closed when not in use.

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