

## BONDERITE C-AK 71110

Known as LS-TP1 (DE)  
February 2017

### PRODUCT DESCRIPTION

BONDERITE C-AK 71110 provides the following product characteristics:

|                     |                    |
|---------------------|--------------------|
| <b>Technology</b>   | Industrial Cleaner |
| <b>Product Type</b> | Alkaline Cleaner   |
| <b>Application</b>  | Steel Strip        |

BONDERITE C-AK 71110 is a high alkalinity, heavy duty, dip, spray and electro-cleaner formulated for fast, efficient cleaning of steel strip prior to continuous annealing, electroplating and galvanizing.

BONDERITE C-AK 71110 incorporates a blend of surfactants for rapid penetration and emulsification of a wide range of rolling oils. Such emulsions are designed to be sufficiently unstable to allow separation of oil on standing for subsequently effluent disposal.

BONDERITE C-AK 71110 is a pale yellow, clear liquid with an SG of 1.33 at 20°C.

#### Remark:

When cleaning zinc coated components prior to painting, high concentration solutions may convert surface zinc to insoluble zinc salts, these reduce subsequent phosphate treatment and paint adhesion efficiency. Using low cleaner concentration and following with a sour rinse may prevent this.

### 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.

#### **Operating Data:**

##### Dip Cleaning:

Concentration: 3 to 5 % v/v  
Temperature: 60 to 80 °C  
Treatment time: variable

##### Spray Cleaning:

Concentration: 2 to 4 % v/v  
Temperature: 60 to 80 °C

Spray pressure: 20 to 40 psi  
Time: variable

#### Remark:

For zinc coated steel, prior to painting, maximum concentration is 1% v/v.

#### Electro-cleaning:

Concentration: 3 to 8 % v/v  
Temperature: 50 to 80 °C  
Current density: 4 to 10 A/dm<sup>2</sup>  
Time: variable

The cleaning conditions required will depend upon the degree of soil contamination present on the metal surface, the substrate to be cleaned and the cleaning time. Optimum cleaning conditions for specific applications will be advised by the Henkel Technical representative.

#### **Bath Control:**

Titrate 10 mL aliquot of working solution with N acid to phenolphthalein end point.

Concentration (% v/v) = 1.1 x titration (mL N acid)

#### **Water rinse:**

All work processed through the cleaning section should be rinsed in hot water (50 to 80°C) immediately after cleaning.

#### **Equipment:**

Mild steel is suitable for construction of tanks, pipework and other equipment.

In spray applications, maintenance will be simplified if nozzles are fabricated from 300 series stainless steel.

The heat exchanger plates should be polished 316 stainless steel.

All process circulating pump seals, valves and other elastomers that come into contact with the working solution should be Teflon, Polypropylene, Nitrile and to a lesser extent, owing to its shorter lifetime, Viton. EPDM elastomers should be avoided.

Brass, aluminium or other light alloy fittings must **NOT** be used.

#### **Precautions:**

BONDERITE C-AK 71110 contains caustic alkalis. Avoid contact with skin, eyes and clothing.

Normal precautions for handling caustic products should be observed, including wearing of protective PVC or rubber gloves, apron and face shield or goggles approved to EN 166/3F.

In case of spillage or contact with skin or clothing, drench with water. For eyes, rinse with plenty of clean water and

continue irrigation for at least ten minutes, whilst obtaining medical attention.

#### Effluent Information:

Solution of BONDERITE C-AK 71110 left to stand will separate into water and oil phases, which may be weird off for disposal.

The spent aqueous phase should be processed through a wastewater treatment plant prior to discharge to sewer.

The processing bath and sludge will contain ingredients other than those present in BONDERITE C-AK 71110.

#### Storage:

|  |         |
|--|---------|
| Temperature, °C  | 0 to 40 |
| Shelf-life, months<br>(in unopened original packaging) | 24      |

#### Classification:

Please refer to the corresponding **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.

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