

**BONDERITE C-NE 5013 I**

April 2020

**PRODUCT DESCRIPTION**

BONDERITE C-NE 5013 I provides the following product characteristics:

<b>Technology</b>	Industrial Cleaner
<b>Product Type</b>	Neutral Cleaner
<b>Application</b>	Parts Cleaning
Concentration on steel and nonferrous metals	5 to 20 g/L
Concentration on cast iron	15 to 30 g/L
Operating Temperature	20 to 80 °C spray process

BONDERITE C-NE 5013 I is an aqueous neutral cleaner. It is composed of surfactants, salts of organic acids and hydrotropes. BONDERITE C-NE 5013 I is free of solvents. It contains organic corrosion protection components, inhibitors, nonionic surfactants and cationic surfactants for nonferrous metals. Change of colour is caused by raw material and has no impact on performance.

**Application Areas:**

Cleaning after cutting, stamping or pressing, simultaneously passivating steel, cast iron and nonferrous metals. BONDERITE C-NE 5013 I is used in spray processes.

**TECHNICAL DATA**

Appearance	clear, colourless liquid
Density at 20°C, DIN 51757	~1.07 g/cm <sup>3</sup>
pH-value (1% solution):	~8.0

**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:**

Add the required amount carefully to the circulation system.

Concentration on steel and nonferrous metals	5 to 20 g/L
Concentration on cast iron	15 to 30 g/L

**Operating Data:**

Temperature	20 to 80°C
Duration of treatment	0.5 to 3 min

**Bath Control:**

BONDERITE C-NE 5013 I solution is controlled by titration of total alkalinity.

Feed, mL	100 mL
Titrant:	0.5 N hydrochloric or 0.5 N sulphuric acid
End point:	pH 3.6
Indicator:	Methyl orange
Titration factor (TF):	3.4

- Pipette 100 mL bath solution into a clean 300 mL Erlenmeyer-flask.
- Add 4 to 5 drops of indicator.
- Titrate the solution with 0.5 N hydrochloric or 0.5 N sulphuric acid.
- The endpoint will be shown by a colour change from orange to red (pH: 3.6).
- Multiply the consumption of the acid solution with the titration factor (TF), to get the concentration in g/L
- Divide this by 10 to get the value in %.

**Additional Directions:**

Corrosion protection is increased, if deionized water instead of tap water is used and the work pieces are stored at low relative air humidity and shielded against weather exposure.

**Classification:**

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

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

**Storage:**

Recommended Storage Temperature	0 to 40°C
Shelf-life, months	24months
Frost-Sensitive	yes

## ADDITIONAL INFORMATION

### Disclaimer

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Reference 0.1