

BONDERITE® C-NE N

September 2024

Product description

BONDERITE® C-NE N provides the following product characteristics:

Technology	Industrial cleaner
Product type	Neutral deruster
Application	Parts cleaning, Derusting

BONDERITE® C-NE N is a neutral rust and scale remover designed for immersion and spray processes on a wide variety of materials including ferrous and non-ferrous metals. It is especially applicable for the removing of residues resulting from deburring processes or laser cutting.

Technical data

Appearance	bright yellowish liquid
Density at 20°C, DIN 51757, g/cm ³	1.3
pH-value (depending on conc.)	5 to 7

Direction 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:

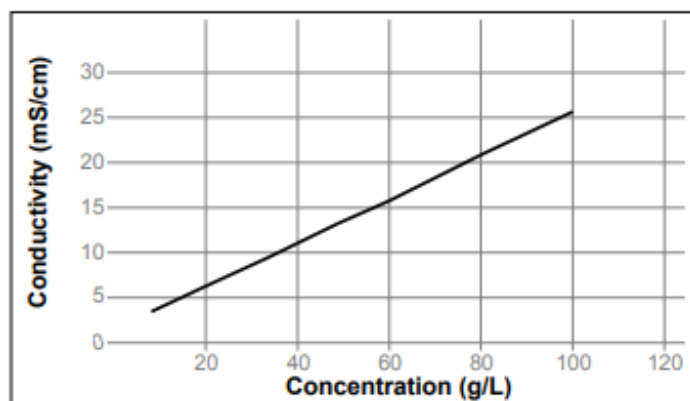
Concentration in spray processes, g/l	20 to 30
Concentration in immersion process, g/l	30 to 100
Operating temperature, °C	20 to 70

Bath control:

Normally the BONDERITE® C-NE N bath is controlled by measuring conductivity and iron content. The iron content can be measured via AAS resp. ICP or for a first orientation via photometric measurement or test strips. The max. iron content should be 50 g/l but this limit can vary depending from application.

Data for a fresh bath:

Conductivity of BONDERITE® C-NE N



Temperature coefficient: 2.22 %/°C

Standard procedure:

The bath make-up is depending on the degree of rust or scale on the surface. Non-ferrous metals and other surfaces should be tested prior to use. Add the required amount carefully to the circulation system.

Make-up for spray processes, %	2 to 3
Make-up for immersion processes, %	3 to 10
Temperature, °C	20 to 70
Duration of treatment	depending on grade of rust

- Derusting with BONDERITE® C-NE N
- Rinse (mechanically supported)
- Passivation
- Drying

General recommendation:

If BONDERITE® C-NE N is used in front of a degreasing stage an addition of a surfactant package (0.2 to 0.5%) is recommended to improve wettability. The life time of the bath is depending on the concentration and the iron content. In special cases as an option for measurement of concentration following titration can be used after consulting our customer service (if a fresh bath is controlled the addition of triethanolamine is obsolete).

Bath control (Determination of active BONDERITE® C-NE N in used bathes by titration):

- Pipette 10 mL of bath solution into an Erlenmeyer flask and dilute with 150 mL of distilled water.
- Add 1 to 2 indicator buffer tablets and stir until the indicator is solved.
- Add 2 mL triethanolamine to “mask” the solved iron.
- Add approx. 3 to 4 drops ammonia solution 25% and control the colour of the solution.
- If the colour changes to red directly, no active BONDERITE® C-NE N is present in the bat.
- If the color is strongly green titrate the sample with 0.1N CaCl₂ solution until the colour changes from green to “dirty” red.
- The used mL 0.1 N CaCl₂ solution multiplied by 0.35 gives the content of active BONDERITE® C-NE N in %.

Materials:

- Erlenmeyer flask, 300 ml
- Burette, 25 ml
- Indicator buffer tablets (Merck no. 1.08430.0500)
- Ammonia solution (Merck no. 1.05432.1011)
- CaCl₂ x 2 H₂O (Merck 1.02382.0500)
- Deionized water
- Triethanolamine 99%
- Manufacturing of 0.1 N CaCl₂ solution: weight 14.702 g CaCl₂ x 2 H₂O into a 1000 ml volumetric flask and add deionized water until the mark is reached.

Classification:

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

Transport Regulations
Hazardous Information
Safety Regulations

Storage:

Frost-sensitive	Yes
Recommended storage temperature, °C	0 to 40
Shelf-life, months	24

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