BONDERITE

Technical Data Sheet

BONDERITE C-AK L-95

Known as Novaclean L 95
January 2020

PRODUCT DESCRIPTION

BONDERITE C-AK L-95 provides the following product characteristics:

Technology	Industrial Cleaner
Product Type	Alkaline Cleaner
Application	Parts Cleaning
Concentration, mL/L	30 to 70
Operation Temperature °C	20 to 90

Application Areas:
BONDERITE C-AK L-95 is used in spray processes. Performance can be increased by adding a suitable cleaning booster.

BONDERITE C-AK L-95 is a liquid, strong alkaline product for the cleaning of metallic surfaces.
BONDERITE C-AK L-95 is used for both chemical cleaning (with a surfactant additive) or electrolytic cleaning.
BONDERITE C-AK L-95 is used also by spray application or in ultrasonic tanks with the appropriate additive.
BONDERITE C-AK L-95 is used also for the phosphate or soap removal in the cold forming operation.
BONDERITE C-AK L-95 is used for the cleaning of metallic surfaces prior to electroplating or chemical plating, prior to enemelling or prior to organic coating.
BONDERITE C-AK L-95 is particularly designed for ferrous and copper alloys. Do not use on light metals (aluminium alloys).

TECHNICAL DATA

Appearance	colourless to pale yellow, clear liquid
Density, g/cm³	1.42
pH-value: (in a solution of 10 g/L)	~13

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:
The BONDERITE C-AK L-95 process can be applied by dip, by spray or in ultrasonic tanks.
The working parameters are:

1. Cleaning by dip:

Concentration:	
BONDERITE C-AK L-95	35 to 70 ml/l
Detergent additive:	2 to 10 ml/l
Temperature:	50 to 90 °C
Treatment time	5 to 15 min

It is recommended to maintain a light agitation, for example with compressed air, in order to
renew the cleaning solution in contact with the metallic surface to be cleaned. Be carefull, too
much agitation may generates foam.

2. Cleaning in ultrasonic tanks:

Concentration:	
BONDERITE C-AK L-95:	30 to 60 ml/l
Detergent additive:	2 to 5 ml/l
Temperature:	50 to 70 °C
Treatment time	2 to 5 min

3. Electrolytic cleaning:

Concentration	40 to 70 ml/l
Temperature:	20 to 60 °C
Treatment time	1 to 5 min
Current density	2 to 10 A/dm²

BONDERITE C-AK L-95 is used for anodic electrocleaning of steel surfaces.
However, it can be used also:

- for cathodic electrocleaning
- for cathodic electrocleaning and then anodic electrocleaning (if possible in different tanks).
- for periodic current inversion

BONDERITE C-AK L-95 can be used at ambiant temperature (20 to 25°C), but an increase of temperature increases its efficiency, particularly because it increases the conductivity of the cleaning solution.

4. Cleaning by spray:

Henkel

Concentration:	
BONDERITE C-AK L-95:	10 to 30 ml/l
Detergent additive:	1 to 3 ml/l
Temperature:	30 to 70 °C
Treatment time	1 to 5 min
Pressure	1.5 to 2 bars

The choice of the detergent additive depends of the working temperature.
Note: Some different working conditions may be recommended by our technical engineer
depending of your specific requirements.

Equipment notes:
The tank and heating system should be made of steel or stainless steel.
Do not use aluminium or copper alloys.
An extraction of the vapours is recommanded.

Bath Control:
Free alkalinity:

- Take a sample of the bath and cool it down to room temperature.
- Pipette 10 mL of bath solution into an Erlenmeyer flask and add 50 mL Deionised water.
- Add 3 to 5 drops of phenolphthalein indicator.
- Titrate the solution with 1 N hydrochloric acid.
- The endpoint will be shown by a colour change from pink to colourless.
- The consumption of 1 N hydrochloric acid in mL is equal to the point of free alkalinity.

Results:
Free alkalinity (number of points) = V
Concentration BONDERITE C-AK L-95 (mL/L) = V x 10.8
Concentration BONDERITE C-AK L-95 (g/L) = V x 15.3

Bath adjustments:

The bath concentration is maintained constant by regular additions of BONDERITE C-AK L-95, preferably with a dosing pump and if necessary by punctual additions.

A bath at a concentration of 50 mL/L has a free alkalinity of about 4.5 points.

The free alkalinity is increased by 1 point, by addition of 10.8 mL/L (15.3 g/L) BONDERITE C-AK L-95.

The addition of detergent additive is made in proportion of the quantity of BONDERITE C-AK L-95 added.

However, in case of parts difficult to clean, it is necessary to add some more detergent additive in order to solve a temporary problem.

When a de-oiler or an ultra-filtration system is used, some of the detergent additive is collected together with the oil removed.
The addition of detergent additive should correct this situation.

Classification:
Please refer to the corresponding **Material 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. Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:
In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:
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. 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.
Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada Corporation, the following disclaimer is applicable:
The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage
Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 0.1

Henkel AG & Co. KGaA
40191 Düsseldorf, Germany
Phone: +49-211-797-0

Henkel Corporation USA
Madison Heights, MI 48071
Phone: +1-248-583-9300

Henkel (China) Co. Ltd.
201203 Shanghai, China
+86.21.2891.8000

For more information, please contact us on www.henkel.com

This document was created and digitally signed by tdx.henkel.com at 2025-11-27T13:04:10.710Z