BONDERITE

Technical Data Sheet

BONDERITE C-AK 1000

Known as Novaclean 1000
May 2016

PRODUCT DESCRIPTION

BONDERITE C-AK 1000 provides the following product characteristics:

Technology	Industrial Cleaner
Product Type	Alkaline Cleaner
Application	Paper Industry

BONDERITE C-AK 1000 is an alkaline detergent, especially developed for the cleaning of equipment in paper industry.

BONDERITE C-AK 1000 is particularly suited for maintenance of:

- Pulp section, coating finishing section, whitewater (stock slurry), waste water.
- Press roll and suction roll (aspiring cylinders).
- Mold cylinders, save-all.
- Vacuum pumps, pulp pumps, water pumps.
- Head box, plain dandy rolls, etc.

TECHNICAL DATA

Appearance	heterogeneous powder
Color	white
pH-value (in a solution of ~10 g/L)	13.4

Easily miscible/soluble in water
Highly alkaline product
High cleaner efficiency and complexing agents
Not to be used on light metals

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.

Use
BONDERITE C-AK 1000 is used for the cleaning and maintenance of equipment in paper industry. Mostly used in circulation, but also possible to be used in spraying or dipping applications.

Operating Parameters:
The operation parameters vary as follows depending on the application:

- Concentration: 10 to 200 g/L.
- Temperature: 20 to 80 °C.
- Treatment time: 20 min until several hours, depending on the pollution of the circuit to be cleaned.

Application:
1) Press roll and suction roll

The application is done by injection of the cleaning solution through interior rinse of the roll at low speed.

A closed circuit can be provided with an integrated basin or with a ditch/pit for wet defective or torn paper.

- Concentration: between 50 and 100 g/L.
- Volume of solution: ~500 liters
- Temperature: room temperature or if possible 40 °C.
- Time: from 2 until 8 hours.

2) Pulp section and white water

It is recommended to circulate through the water reservoir of the white water for the treatment of head box and breast roll.

The treatment frequency depends on the buildup of contaminations. A regular treatment however can avoid the use of costly chemicals.

- Concentration: between 5 and 20 g/L.
- Temperature: between 20 and 50°C.
- Treatment time: from 20 to 30 minutes or more.

3) Circuit of white water, waste water and sand filter

The previous method can also be used in this case.

4) Drip-in with organic residues

BONDERITE C-AK 1000 is used in a concentration between 3 and 5 %, when the production is stopped or dabbed in water (Bubble).

5) Save-all

Same application as the previous one.

6) Vacuum pumps

A pre-cleaning with BONDERITE C-AK 1000 in a concentration of approx. 5 % is highly recommended when organic residues are present.

Henkel

7) Cleaning of wire section (plastic, metallic)

The use of BONDERITE C-AK 1000 in a concentration of ~3 % gives the possibility to eliminate the organic residues and aluminium hydrate (necessary to work with pH above 11).

8) Synthetic felts (only)

The cleaning is done with BONDERITE C-AK 1000 in a concentration of 2 to 3 % during approx. 20 minutes when production is stopped or in production, every 24 hours.

9) Mold cylinders

BONDERITE C-AK 1000 is used in a concentration between 3 to 5 %. The contact time has to be determined in function of the contamination.

10) Coating finishing section

Almost all the finishing coatings can be eliminated when using BONDERITE C-AK 1000 in a concentration of 50 to 100 g/L, and a temperature of 50 to 60 °C.

Control

A) Dosing method:

Procedure

- Take a sample of the bath and let it cool down to room temperature.
- With a pipette, take 5 mL of the solution and pour it in an Erlenmeyer.
- Add approx. 50 mL distilled water and 3 to 5 drops of the indicator phenolphthalein.
- The solution becomes pink.
- Titrate with a solution of hydrochloric acid 0.1 N until the turn of the indicator from pink to colorless.
- Note V mL added.

Formulas

Free Alkalinity (in point) = V

Concentration of BONDERITE C-AK 1000 (in g/L) = V x 8.7

B) Bath adjustments:

A bath with BONDERITE C-AK 1000 is maintained (within the working parameters) by adding product on a regular base.

A bath with a concentration of 20 g/L free alkalinity = approx. 2.3 points.

In order to raise the free alkalinity with 1 point, add 8.7 g/L BONDERITE C-AK 1000.

Caution:

BONDERITE C-AK 1000 is a strong alkaline product, containing caustic soda (sodium hydroxide). The precautions to be taken are equal to the measures to be taken when using caustic products.
In contact with the skin or eyes, the product may cause sever irritations or burns.
Wearing boots, gloves, safety glasses and protective clothes is recommended.
In case of contact with eyes or skin, immediately rinse with plenty of water and contact a specialist.

Effluent Information:

For the rejection of the used solutions, please proceed as follows:

- Elimination of oils by acid breaking or other physical or chemical suited treatment.
- Neutralization by use of an acid (hydrochloric or sulfuric) to precipitate the salts and to adjust the pH between 6.5 and 9.
- Decantation of the sludge.

Verify the conformity of the effluent with the legislation.

Storage

BONDERITE C-AK 1000 has to be stored in closed packaging, in a temperate room, in a dry place.
Keep away from acid compounds.

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 0.0