

BONDERITE C-AK 1523 R

Known as Parco Cleaner 1523
May 2022

PRODUCT DESCRIPTION

BONDERITE C-AK 1523 R provides the following product characteristics:

Technology	Industrial Cleaner
Product Type	Alkaline Cleaner
Application	Parts Cleaning

BONDERITE C-AK 1523 R is a multi-package, low temperature, phosphate-free, liquid cleaner formulated to prepare ferrous and non-ferrous surfaces to receive uniform, dense, conversion coatings. This medium to heavy-duty cleaning solution is designed specifically for use in the automotive industry. The treatment solution may be applied by spray or immersion and is very effective in removing metal working fluids and soils.

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:

	Spray	Immersion
BONDERITE C-AK 1523	9.6 kg (7 L) Per 1,000 L	15.4 kg (11.2 L) Per 1,000 L
BONDERITE C-AK 1523S	1.3 kg (1.3 L) Per 1,000 L	1.6 kg (1.6 L) Per 1,000 L

Operating Data:

	Spray	Immersion
Free Alkali, points	3 to 7	3 to 12
Total Alkali/Free Alkali Ratio	<3.0	3.0
Time, min	2 to 2	2 to 3
Temperature, °C	-10 to 50	-10 to 50

Materials:

BONDERITE C-AK 1523A
BONDERITE C-AK 1523 Optional
BONDERITE C-AK 1523RC Optional
BONDERITE C-AK 1523S
Testing Reagents and Apparatus

Equipment:

The process tank, housing, pumps and piping for use with this solution may be constructed of mild steel. In spray applications, maintenance will be simplified if nozzles are constructed of 300 series stainless steel. The heat exchanger plates should be polished 316 stainless steel. If gas fired burner tubes are used, they should be made of schedule 80 mild steel pipe or equivalent. Automatic process control equipment, which promotes consistent quality and controlled costs, is available for automatically controlling this process. Auxiliary equipment, which is engineered and specified for this process, include air operated chemical transfer pumps, chemical metering pumps, reliable level controls, solenoid valve assemblies and bulk storage tanks. All chemical pump seals, valve seats and other elastomers which come in contact with the concentrated solution should be Teflon or Hypalon™.

Cleaning Procedure:

Spray:

3.6 kg (3.2 L) of BONDERITE C-AK 1523 and 0.5 kg (0.5 L) of BONDERITE C-AK 1523S per 455 L of solution volume.

Immersion:

5.6 kg (4.8 L) of BONDERITE C-AK 1523 and 0.6 kg (0.6 L) of BONDERITE C-AK 1523S per 455 L of solution volume.

Fill the tank about three-fourths full with water. Add the proper amount of each chemical and circulate. Add sufficient water to bring the solution up to the working level and then heat to the operating temperature. Test for free alkali and adjust if necessary before processing any work.

Operation:

Time: 30 sec to 3 min
Temperature: -10 to 50 °C

After the best values for time and temperature have been established, they should be maintained closely. Temperature should be held within -15°C.



Bath Control:Free Alkali:

- Pipette a 10 mL sample into a 150 mL beaker.
- Add 5 drops of Indicator 3.
- Titrate with Titrating Solution 20 until one drop discharges the last of the pink color.
- The mL of Titrating Solution 20 used is the Free Alkali value in points.

Spray: 3 to 7 points (mL)
Immersion: 3 to 12 points (mL)

Free Alkali range: Within 0.5 point of the value found to give the best results.

To increase value 1 point: 0.7 kg of BONDERITE C-AK 1523 per 1,000 L of solution volume (0.6 L per 455 L).

BONDERITE C-AK 1523A is an alkaline package beneficial in maintaining a higher cleaner pH than when using BONDERITE C-AK 1523. Typically, the cleaning solution is prepared using BONDERITE C-AK 1523 and then replenishing using BONDERITE C-AK 1523A. The replenishing rate for BONDERITE C-AK 1523A is equal to that of BONDERITE C-AK 1523.

BONDERITE C-AK 1523S is added to the solution to assist in cleaning and it should be added each time BONDERITE C-AK 1523 or BONDERITE C-AK 1523A, is added to the tank. Add 1.4 kg (1.4 L) of BONDERITE C-AK 1523 R for each 15 kg (10 L) of BONDERITE C-AK 1523. Consult our representative as to the correct rate of addition prior to using.

The strength of the solution in kg per 455 L or in L per 455 L can be determined from the free alkali points using the equations or the table below.

kg BONDERITE C-AK 1523 per 455 L = 1.62 x points.
 L BONDERITE C-AK 1523 per 455 L = 0.13 x points.

kg per 455 L	L per 455 L	Points
7.3	0.6	4.5
9.8	0.8	6.0
12.2	1.0	7.5
14.6	1.2	9.0
17.1	1.4	10.5
19.5	1.6	12.0
22.0	1.8	13.5
24.4	2.0	15.0

The cleaning solution strength may be increased or reduced depending upon the type of soil, the time available and the characteristics of the equipment in which it is used.

Additional BONDERITE C-AK 1523S may be required to restore surfactant lost when a thermal oil separator is used or to improve detergency and cleaning ability. Your Henkel representative can assist in determining if this addition is required.

Total Alkali:

- Pipette a 10 mL sample into a 150 mL beaker.
- Add 5 drops of Indicator 2.
- Titrate with Titrating Solution 20 from blue through green until one drop discharges the last of the green color.
- The mL of Titrating Solution 20 used is the Free Alkali value in points.
- The Total Alkali value is used to calculate the alkali ratio.

Total Alkali/Free Alkali Ratio:

As the cleaner is used and becomes contaminated, the total alkali value will rise. Thus, the ratio of the total alkali value to the free alkali value will also rise and this becomes a useful measure of the degree of contamination of the cleaner solution. The solution may be periodically dumped or continuously overflowed or autodrained to keep the total alkali to free alkali ratio from exceeding the maximum value determined for the system. Total Alkali/Free Alkali Ratio should be monitored. The value under typical cleaning conditions should not be allowed to exceed 3.0.

Waste Water Treatment:

Applicable regulations covering disposal and discharge of chemical should be consulted and followed.

Disposal information for BONDERITE C-AK 1523 R is given on the Material Safety Data Sheet.

The processing bath is acidic. Neutralization of rinse water or processing solution may be required prior to discharge to the sewer.

The processing bath and sludge which accumulates in the bath can contain ingredients other than those present in the chemical as supplied and analysis of the bath may be required prior to disposal.

Precautions:

When handling the chemical products used in this process, the first aid and handling recommendations on the Material Safety Data Sheet should be read, understood, and followed. The processing bath is alkaline and can cause severe burns. Do not take internally. Do not get in eyes, on skin or on clothing. In case of contact, follow the recommendations on the Material Safety Data Sheet for BONDERITE C-AK 1523 R.

Classification:

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

Hazards identification
Transport information
Regulatory information

Storage:

Recommended Storage Temperature 5 to 40°C
 Shelf-life, months 36



No special storage requirements are needed for BONDERITE C-AK 1523 or BONDERITE C-AK 1523A. However, extreme temperatures should be avoided when storing BONDERITE C-AK 1523S. Indoor storage at or near ambient temperature is recommended.

ADDITIONAL INFORMATION

Disclaimer

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.

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Reference 0.0