

BONDERITE C-AK 2807

ALKALINE CLEANER

(KNOWN AS AQUENCE 2807 CLEANER)

Issued
9/10/2014

INTRODUCTION:

BONDERITE C-AK 2807 (known as AQUENCE 2807 CLEANER) is a concentrated liquid, non-silicated, alkaline immersion cleaner for ferrous metals. The solution is used to remove a variety of soils, oils and forming lubricants from steel prior to the application of autodeposited coatings.

BONDERITE C-AK 2807 exhibits excellent bath life, good scale inhibition and prevents soil re-deposition. It is easily controlled and can be automatically metered and monitored electronically.

OPERATING SUMMARY:

| | |
|---|---|
| Chemical: BONDERITE C-AK 2807 | Bath Preparation per 100 Gallons: 4 to 15 gallons |
| Operating and Control: Free Alkali: Time: Temperature: | 5.4 to 20.4 points (ml) 1 to 5 minutes immersion 140° to 180° |

MATERIALS:

BONDERITE C-AK 2807
Testing Reagents and Apparatus

EQUIPMENT:

The process tank, pumps and piping for use with this solution may be constructed of mild 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. All process circulating pump seals, valve seats and other elastomers which come in contact with the working process solution should be PTFE. FKM may be used but its life will be shorter. EPDM elastomers should be avoided.

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 PTFE or CSPE. Your local sales representative should be consulted for information on Henkel automatic process control equipment for this process and any additional questions.



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TREATING WITH THE BONDERITE C-AK 2807 SOLUTION:

Buildup:

Fill the tank about 2/3 full with cold water. A typical cleaning solution is prepared by adding 5.0 gallons (19 liters) of BONDERITE C-AK 2807 chemical for each 100 gallons of operating volume. Add water to the operating level, stir thoroughly and heat to the operating temperature.

Operation:

Temperature: 140 °F to 180 °F

Time: 1 to 5 minutes immersion.

The initial charge and replenishment data contained herein are normal for most installations; however, our technical representative may suggest a deviation from this data if indicated by local conditions. If the work is heavily soiled and additional cleaning power is needed, increase the cleaner bath concentration as desired up to 15%.

TESTING AND CONTROL

Never pipet by mouth. Use a pipet filler.

Free Alkali:

Pipet a 5 ml sample into a 150-ml beaker. Add approximately 20 ml of distilled water. Add 5 drops of Indicator 3. Titrate with Titrating Solution 61 until one drop discharges the last of the pink color. The ml of Titrating Solution required indicates the concentration (free alkali) in points.

The concentration may be calculated from the following equation:

Gal (% v/v) BONDERITE C-AK 2807 per 100 gal = points ÷ 1.36

Maintain the concentration within ± 0.2 point of the value found to give best results.

To increase concentration 1.0 point: Add 3/4 gallon of BONDERITE C-AK 2807 chemical per 100 gallons. If desired, the concentration may be obtained from the following table:

Concentration gal per Percent by
Henkel AQUENCE® 2807 CLEANER

| 100 gal | Volume | Points |
|-----------|------------|--------|
| 4.0 | 4.0 | 5.4 |
| 5.0 | 5.0 | 6.8 |
| 6.0 | 6.0 | 8.2 |
| 7.0 | 7.0 | 9.5 |
| 10.0..... | 10.0 | 13.6 |
| 15.0..... | 15.0 | 20.4 |

STORAGE REQUIREMENTS:

BONDERITE C-AK 2807 is a liquid product which must be protected from freezing. Opened containers should be kept closed when not in use.



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WASTE DISPOSAL INFORMATION:

Applicable regulations covering disposal and discharge of chemicals should be consulted and followed. Disposal information for the chemical in the form as supplied, is given on the Material Safety Data Sheet for the chemical. The processing bath is alkaline and contains phosphate. Waste treatment and/or neutralization of rinse water or processing solution may be required prior to discharge to the sewer. (Refer to Waste Treatment Information Bulletin WT1007, available on request). The cleaning solution and sludge can contain ingredients other than those present in the chemical as supplied and analysis of the solution and/or sludge may be required prior to disposal.

PRECAUTIONARY INFORMATION:

When handling the chemical used in this process, the precautionary, first aid and handling recommendations on the Material Safety Data Sheet for the product should be read, understood and followed. The processing bath is alkaline and can cause irritation of the skin and eyes. 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 2807. Henkel's BONDERITE C-AK 2807.

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TESTING REAGENTS AND APPARATUS

(Order only those items which are not already on hand)

| Code | Quantity | Item |
|-------------|----------|--|
| 89000-202** | 2* | Beaker, 150-ml, Glass |
| 89003-482** | 1 | Bung Wrench |
| 592477 | 1 | Buret Assembly, 25-ml Automatic, Glass |
| 592398 | 1 qt | Indicator 3 (phenolphthalein) |
| 592475 | 1 | Indicator Dropping Bottle, 2 oz. |
| 89003-350** | 2* | Pipet, 10-ml Volumetric, Glass |
| 53497-009** | 1 | Pipet Filler |
| 30250*** | 1 | Thermometer, Floating |
| 592441 | 1 gal | Titration Solution 61 (0.1N HCl) |

* Includes one more than actually required, to allow for possible breakage.

** VWR Part # - vwr.com or 800-932-5000

***Thomas Scientific Part #

Henkel Corporation | 32100 Stephenson Highway | Madison Heights, MI 48071
PHONE: (248) 583-9300 | FAX: (248) 583-2976 | www.henkelna.com/

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