

BONDERITE C-AK 2077X

ALKALINE CLEANER

(KNOWN AS PARCO CLEANER 2077X)

Issued 7/1/2013

1. Introduction:

BONDERITE C-AK 2077X (known as PARCO CLEANER 2077X) is a highly alkaline cleaner formulated primarily to completely remove BONDERITE coatings from steel. This cleaner will remove both sodium and calcium soaps, all BONDERITE coatings and a variety of other soils. It is designed to solubilize and holds these soils in suspension to avoid redeposition of soils.

BONDERITE C-AK 2077X (known as PARCO CLEANER 2077X) can be used as a heavy duty cleaner to remove any soil such as heavy-duty drawing compounds, cutting oils and other forming lubricants from steel.

2. Operating Summary:

<u>Chemical:</u>	<u>Bath Preparation per 100 Gallons:</u>
BONDERITE C-AK 2077X (known as PARCO CLEANER 2077X)	12 to 50 pounds
<u>Operation and Control:</u>	
Free Alkali	2.2 to 8.8 points (ml)
Time	3 to 20 minutes
Temperature	180° to 200° Fahrenheit
<u>Typical Operation:</u>	
25 pounds per 100 gallons immersed for 5 minutes at 190° Fahrenheit.	

3. Materials:

BONDERITE C-AK 2077X (known as PARCO CLEANER 2077X)
Testing Reagents and Apparatus

4. Equipment:

The process tank, pumps and piping for use with this solution may be constructed of mild steel. In spray applications, maintenance will be simplified if nozzles are fabricated from 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. 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.



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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. Chemixers are available in three stages for preparing solutions of powdered products which then may be metered into the process at a controlled rate. 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 Technologies automatic process control equipment for this process and any additional questions.

5. Cleaning with the BONDERITE C-AK 2077X (known as PARCO CLEANER 2077X) Solution:

Buildup:

Fill the tank 3/4 full with cold water and add 12 to 50 pounds of BONDERITE C-AK 2077X (known as PARCO CLEANER 2077X) per 100 gallons of solution (2 to 8 ounces per gallon). Fill the tank to the operating level, then heat to the operating temperature.

Operation:

Time: 3 to 20 minutes
Temperature: 180° to 200° Fahrenheit

When the best conditions of concentration, time and temperature have been established, they should be maintained for purposes of economy and efficient cleaning. When such conditions no longer produce acceptable cleaning, an indication of excessive contamination by grease and soil, the solution should be discarded.

6. Testing and Control:

Never pipet by mouth, use a pipet filler.

Free Alkali:

Pipet a 10 ml sample into a 150-ml beaker. Add 50 ml of water and 5 drops of Indicator 3. Titrate with Titrating Solution 60 until one drop changes the red back to the original brown of the sample. The ml of Titrating Solution 60 required indicated the free alkali value in points.

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

To increase value 1 point (ml): Add 5.7 lb of BONDERITE C-AK 2077X (known as PARCO CLEANER 2077X) per 100 gallons.

The strength of the solution in pounds per 100 gallons or in ounces per gallon can be calculated from the free alkali value in points using the equations below or can be obtained from the table.

Pounds of BONDERITE C-AK 2077X (known as PARCO CLEANER 2077X) per 100 gallons = 5.7 x points.

Ounces of BONDERITE C-AK 2077X (known as PARCO CLEANER 2077X) per gallon = .91 x points.

<u>lb per 100 gal</u>	<u>oz per gal</u>	<u>points</u>
12.5	2	2.2
25	4	4.4



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50	8	8.8
100	16	17.6

The strength of BONDERITE C-AK 2077X (known as PARCO CLEANER 2077X) may be increased or reduced, depending on the type of soil, the time available for cleaning and the characteristics of the equipment in which it is used.

7. Storage Requirements:

BONDERITE C-AK 2077X (known as PARCO CLEANER 2077X) does not require any special storage. However, this product is strongly alkaline and may react violently when mixed with acids. Do not store near acidic materials, flammable liquids, organic halogenes or soft metals.

8. 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. Neutralization may be required prior to discharge to the sewer. (Refer to Waste Treatment Information Bulletin WT1007, available on request.)

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 solution and/or sludge may be required prior to disposal.

9. Precautionary Information:

When handling the chemical product used in this process, the 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 may 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 2077X (known as PARCO CLEANER 2077X).

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Testing Reagents and Apparatus

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

<u>Code</u>	<u>Quantity</u>	<u>Item</u>
592462	2*	Beaker, 150-ml
592477	1	Buret Assembly, 25-ml Automatic
592398	1 qt	Indicator 3 (phenolphthalein)
592475	1	Indicator Dropping Bottle
592492	2*	Pipet, 10-ml Volumetric (Lube Removal)
592493	2*	Pipet, 25-ml Volumetric
592494	1	Pipet Filler
594334	1	Thermometer, Floating
592440	1 gal	Titration Solution 60 (1.0N HCl)

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

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Company _____ Technical Process Bulletin No. 235489
Plant _____ Representative _____
Unit _____ Telephone _____

BONDERITE C-AK 2077X (known as PARCO CLEANER 2077X)

Tank Tank No.
Working volume: ____ gallon.
____ gallon per inch.

Buildup ____ pound of BONDERITE C-AK 2077X (known as PARCO CLEANER 2077X).

Operation ____ minutes at ____° Fahrenheit to ____° Fahrenheit.

Testing and Control Test every _____.
10 ml sample.
5 drops Indicator 3.
Titrating Solution 60 until one drop discharges pink color and solution remains clear for 15 seconds.

Range: ____ to ____.
Add ____ pounds _____ gallons of BONDERITE C-AK 2077X (known as PARCO CLEANER 2077X) to increase the strength _____ point.

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