BONDERITE C-NE 220WB
NEUTRAL CLEANER
(KNOWN AS PARCO CLEANER 220WB)

Issued 6/4/2013

1. Introduction:

BONDERITE C-NE 220WB (known as PARCO CLEANER 220WB) is a mildly alkaline liquid cleaner formulated for use in power spray washing of ferrous and non-ferrous metals. It was designed for a wide temperature range and operations where splitting of the oil is preferred. BONDERITE C-NE 220WB (known as PARCO CLEANER 220WB) provides a nitrite free solution of only moderate alkalinity.

BONDERITE C-NE 220WB (known as PARCO CLEANER 220WB) is formulated to split oil, maximize rust inhibition and foam control, while providing personnel safety with moderate cleaning ability. It contains a synergistic blend of organic rust inhibitors designed to leave slightly visible film on the washed and dried parts that will not interfere with gauging and inspection.

BONDERITE C-NE 220WB (known as PARCO CLEANER 220WB) is an alkaline liquid, with a very mild odor, which contains no nitrites, silicates, phosphates or other materials known to require special handling in use or disposal.

2. Operating Summary:

Chemical:	Bath Preparation per 100 gallons:
BONDERITE C-NE 220WB (known as PARCO CLEANER 220WB)	2 to 10 gallons
Operation and Control:	
Free alkalinity:	3.5 to 17.5
Total alkalinity:	4.3 to 21.5
Temperature:	Ambient to 180° Fahrenheit
Time:	As required

3. Materials:

BONDERITE C-NE 220WB (known as PARCO CLEANER 220WB)
Testing Reagents and Apparatus

4. 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 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 40 316 stainless steel for the first four feet and schedule 10 316 S.S. for the remainder. All process circulating pump seals, valve seats, door seals and other elastomers which come in contact with the working process solution should be NBR, PTFE or CSPE. 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.

5. Cleaning with BONDERITE C-NE 220WB (known as PARCO CLEANER 220WB):

Buildup:
BONDERITE C-NE 220WB (known as PARCO CLEANER 220WB) will clean effectively over a wide concentration range. Our representative will assist in establishing the most effective concentration for each application.

6. Testing and Control:

Never pipette by mouth, use a pipette filler.

Free Alkalinity

1. Measure 10 ml of the solution to be tested and transfer into 250 ml Erlenmeyer flask.
2. Add 5 drops of Indicator 3 (Phenolphthalein), whereupon the solution will be pink.
3. Titrate against Titrating Solution 20 until the endpoint is reached. The endpoint is reached when the solution turns from pink to clear. The number of milliliters used to reach the endpoint is the free alkalinity.
4. The concentration of BONDERITE C-NE 220WB (known as PARCO CLEANER 220WB) as measured by free alkalinity is as follows:
   % BONDERITE C-NE 220WB (known as PARCO CLEANER 220WB) concentration = number of milliliters of T.S. 20 used x 0.57.

Total Alkalinity

5. To the same sample used for determining the free alkalinity above, add 5 drops of Indicator Solution 4 (Methyl Orange). The color will change to yellow-orange.
6. DO NOT RE-ZERO buret. Continue titration with Titrating Solution 20 until the color changes to pink. The total number of milliliters used is called Total Alkalinity.
7. The concentration of BONDERITE C-NE 220WB (known as PARCO CLEANER 220WB) as measured by total alkalinity is as follows:
   % BONDERITE C-NE 220WB (known as PARCO CLEANER 220WB) concentration = number of milliliters of T.S. 20 used x 0.46.

7. Storage Requirements:

Extreme temperatures should be avoided when storing BONDERITE C-NE 220WB (known as PARCO CLEANER 220WB). Indoor storage at or near ambient temperature is recommended.

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.

The cleaner solution is alkaline. Neutralization may be required prior to discharge to the sewer.

The cleaner 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.

9. Precautionary Information:

When handling the chemical in the form as supplied, the precautionary, first aid and handling recommendations on the Materials Safety Data Sheet for the product should be read, understood and followed.

The cleaner solution is alkaline and can cause irritation of the skin and eyes and may burn 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-NE 220WB (known as PARCO CLEANER 220WB).

Testing Reagents and Apparatus
(Order only those items which are not already on hand)

Code	Quantity	Item
592462	3*	Beaker, 150-ml
592477	1	Buret Assembly, 25-ml Automatic
592398	250 ml	Indicator 3 (Phenolphthalein)
592399	250 ml	Indicator 4 (Methyl Orange)
592475	2	Indicator Dropping Bottle
592492	2*	Pipette, 10-ml Volumetric
592494	1	Pipette Filler
592430	1 gal	Titrating Solution 20 (0.1N H_2SO_4)

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

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