

Miracleclean EC-220

Liquid Electrocleaner
Technical Data

GENERAL DESCRIPTION

Miracleclean EC-220 is a highly alkaline liquid soak and electrocleaner for ferrous metals, copper, and copper plated work. **Miracleclean EC-220** has been formulated to be free rinsing, low foaming, and highly conductive (5% solution - 62 mS per cm)

Miracleclean EC-220 will remove a variety of soils including oils, greases, and lubricants. **Miracleclean EC-220** can also be used as a spray cleaner. **Miracleclean EC-220** will also keep plating barrels and other equipment clean and free of oils.

NORMAL USE

Concentration	0.4 – 4% by volume for spray cleaning. 5 – 15 % by volume for soak and electrocleaning.
Temperature	120 – 180° F (49 - 82° C)
Voltage	6 – 9 volts
Current	50 – 125 amps per ft ² at 6 volts.
Equipment	Nickel-plated steel (perforated). Mild steel is also satisfactory.

SOLUTION MAKE-UP

1. Fill tank $\frac{2}{3}$ full with cold or warm water.
2. Slowly add required amount of **Miracleclean EC-220** with mild agitation.
3. Add water to operating level and heat to temperature.

ADVANTAGES

1. Low Foaming.
2. Non-Silicated.
3. Long bath life.
4. Can be used as a soak, spray, and electrocleaner.
5. High level of conductivity.
6. Excellent smut removal.
7. Liquid product can be used with automatic feed.
8. Easy to handle.

NORMAL CONTROL

Analytical Method (Equipment available from Chautauqua Chemicals Co.)

1. Pipette a 10 mL sample into a 250 mL Erlenmeyer flask.
2. Add 50 mL of distilled water.
3. Add 3 to 5 drops of phenolphthalein indicator.
4. Titrate with 0.50N sulfuric acid until pink color disappears.
5. Calculation: Percent Concentration of **Miraclean EC-220** = mLs of 0.50N H₂SO₄ x 0.75

HANDLING AND SAFETY CONSIDERATIONS

Consult MSDS sheet on this product for handling considerations, hazard information, and first aid procedures.

OTHER INFORMATION

No warranty, expressed or implied of merchantability fitness for a particular purpose or otherwise, is made. Buyer assumes all risk of use, storage and handling. Chautauqua Chemicals Company, Inc. shall not be made liable for any incidental or consequential damages arising directly or indirectly in connection with the purchase, storage, handling or disposal of this product.

TDS Number:
Revision Date:

50646C
July 22, 2014

