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EMERGENCY: MARTRON - 704-289-1934 CHEMTREC - 800-424-9300

REF. # MFC-000502

MARTRON E-94 Alkaline Electro Metal Cleaner

Martron E-94 is an economical alkaline electro cleaner for steel, iron and copper prior to electroplating. **Martron E-94** provides high conductivity and excellent detergency for the removal of fabricating oils and compounds. **Martron E-94** is fortified with surfactants for the difficult cleaning jobs. This electro cleaner is non-phosphate and non-chelated.

SECTION 1: BENEFITS

- 1. Rapid wetting and oil removal.
- 2. Highly conductive.
- 3. Excellent hard water tolerance and rinsing.
- 4. Surfactants compatible with subsequent plating and finishing operations.

SECTION 2: OPERATING PARAMETERS

Concentration Temperature Voltage 8-10 oz/gal. 160°F - 190°F 5-8 volts, 30-50 amps/sq. ft.

SECTION 3: CONTROL

- 1. Pipette a 10 ml sample into a 250 ml flask
- 2. Add 25 mls deionized water
- 3. Add 5-6 drops of methyl orange indicator
- 4. Titrate with orange solution to a red point using 1.0 N Sulfuric Acid.

Calculation: ml of 1 N sulfuric acid x .75 = oz/gal Martron E-94

SECTION 4: HANDLING CONSIDERATIONS

This product contains caustic which is very corrosive. When handling this product, do not breathe dust which is very irritating to the upper respiratory tract. Avoid contact with skin and eyes. Wear clean clothes, chemical goggles, rubber gloves, apron, boots, gauntlets, and full-face shield. When making solutions, add product **SLOWLY** to surface of solution with agitation to avoid splatter or violent eruptions. Use adequate ventilation. **DO NOT TAKE INTERNALLY**.

SECTION 5: FIRST AID

If skin / and or eyes are contacted with chemical, immediately flush affected area with clean water for 15 minutes. For skin burn and eye contact, seek medical physician.

SECTION 6: INGESTION

Give plenty of milk or water. Call a physician immediately. Do not induce vomiting. Do not administer liquid if person is unconscious.

SECTION 7: DISCLOSURE

The information contained herein is based on data developed through laboratory and production experience and is believed to be correct. However, *Martron Inc.* makes no warranty, expressed or implied regarding the accuracy of the data or the results to be obtained from the use thereof. *Martron Inc.* assumes no responsibility for injury from the use of the product described herein.