DATE: 2/24/2025 REVISED: JAN 2024

EMERGENCY: MARTRON - 704-289-1934

CHEMTREC - 800-424-9300

REF # - MFC-000525

MARTRON MC-500

Martron MC-500 is a liquid, alkaline, phosphate free and chelating agent free product which may be used as a soak cleaner or as a soak-electro cleaner for cleaning ferrous metals, copper, copper alloys, copper laminate, and zinc die casting. It is an economical heavy-duty soak cleaner formulated to remove fabrication oils, lubricants, and light deposits of buffing compound from ferrous metals, copper, brass, magnesium alloys and zinc die castings. It may also be used to remove chromate coatings and fingerprints from printed circuit boards. Martron MC-500 may be adapted into operations which, because of space, are limited to a brief cleaning line; for example (1) soak, soak-electro or (2) soak-electro.

FEATURES AND BENEFITS

Used on a wide range of substrates.

Can be used as a soak electro cleaner.

High conductivity.

High detergency.

PHYSICAL DATA

Specific Gravity: 1.21

Solubility in water: Infinite

Appearance and odor: Clear, pale-yellow liquid

TYPICAL APPLICATIONS

Soak cleaner in plating lines

Electro cleaner in plating lines

Combination soak / electro clean in plating lines

OPERATING CONDITIONS

Concentrations: 4% - 12%

Temperature: $130^{\circ}\text{F} - 200^{\circ}\text{F} (54^{\circ}\text{C} - 93^{\circ}\text{C}) \text{ Operate at } 120^{\circ}\text{F} - 135^{\circ}\text{F} (49^{\circ}\text{C} - 57^{\circ}\text{C}) \text{ when}$

processing zinc die-casting, brass alloys, and copper laminate

Time: 1 – 5 minutes

Current Density: 20 – 50 amps/ft2 (2.0 – 5.0 mps/dm2 when used as soak-electro)

Equipment: Mild steel or Polypropylene tanks, anodes, and heating coils

Ventilation: Suggested when used as electro cleaner

Note 1: Lower operating temperatures 130°F to 150°F (54°C to 66°C) should be reserved for brass alloys.

Note 2: An overflow for skimming off floating soils is recommended when Martron MC-500 is being used as a soak.

TITRATION METHOD

- 1. Pipette 20 mL of a working bath sample into a 250 mL Erlenmeyer flask.
- 2. Add 30 mL water and drops Phenolphthalein into flask. Swirl flask to insure complete mixture.
- 3. Titrate with 0.5 N Hydrochloric Acid until solution turns colorless.
- 4. Record mL used.

Calculation:

Concentration (%) = mL used in step 4 above x 0.44

WASTE DISPOSAL

Discharge rinse waters and spent solutions to a permitted disposal system. To be completely informed on the latest regulations for your area, please contact the local authorities.

CAUTION

Martron MC-500 is an alkaline product and should be handled accordingly. Avoid skin, eye, and oral contact. Wear protective clothing, gloves and goggles when handling the product. Flush exposed areas immediately with clean, cold water. Contact a doctor immediately in case of injury.