



PRODUCT INFORMATION

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EMERGENCY - MARTRON 704-289-1934
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REF # – MFC-001515

MARTRON C-10-L

Martron C-10-L	provides a clear, iridescent or bronze corrosion resistant chromate coating.
Martron C-10-L	finish is resistant to the formation of white corrosion products and has excellent paint base characteristics.
Martron C-10-L	is easy to control either by visual inspection of chromated parts or by simple titration.
Martron C-10-L	works equally well in both rack and barrel plating lines.
Martron C-10-L	provides superior adhesion compared to other yellow iridescent chromates.
Martron C-10-L	brightens and polishes as it forms chromate coating.

SECTION 1: OPERATING INSTRUCTIONS

BATH PARAMETERS

Yellow Iridescence	Range: 1 to 4% by volume Recommended: 1.5% by volume Dip Time: 5 to 15 seconds
Bronze	Range: 1 to 4% by volume Recommended: 3% by volume Dip Time: 20 to 30 seconds
Temperature	65° - 90°F
Agitation	Air or mechanical agitation recommended
pH	1.3 to 2.0

NOTE: Immersion times can vary depending upon the concentration and the age of the chromate.

SECTION 2: MAINTENANCE ADDITIONS

During normal operation, the concentration of **Martron C-10-L** is gradually diminished and the color obtained on the parts become lighter. The addition of about one tenth to one fifth the initial make-up amount of **Martron C-10-L** will restore the proper color.

Example:	Maintenance addition for a 1,000-gallon tank
	Initial Make-Up 15 gallons Martron C-10-L .
	Maintenance addition 1.5 to 3 gallons Martron C-10-L after color drops off.

Optional Titration Method for Determining Concentration of **Martron C-10-L**

1. Pipette 2 ml sample of the working solution into a 250-ml beaker.
2. Add 10 ml 50% Hydrochloric Acid.
3. Add 10 ml of a 10% Potassium Iodide Solution.
4. Titrate with 0.1N Sodium Thiosulfate to a pale straw color.
5. Add 1 - 2 ml of Starch Indicator.

6. Continue the titration until solution is clear.
7. Record total volume of 0.1N Sodium Thiosulfate used.

Calculation

Percent **Martron C-10-L** = total ml 0.1 N Sodium Thiosulfate X 0.6

SECTION 3: EQUIPMENT

Stainless steel, Ceramic, Koroseal or Tygon-lined tanks are satisfactory for use with **Martron C-10-L** solutions. Rinses and spent solutions of **Martron C-10-L** should be treated to reduce hexavalent chrome and then neutralized. Sulfur Dioxide and Sodium Metabisulfate may be used to accomplish this. Solutions should then be neutralized to pH 7.5 - 8.5 with slated lime to precipitate the trivalent chrome. Consult with authorities for local, state and federal waste disposal requirements.

SECTION 4: HELPFUL HINTS

After adjusting the **Martron C-10-L** bath to the optimum concentration, the pH should be measured with an electrometric pH meter. The pH may be lowered, if required, by the addition of nitric acid.

NOTE: 1 pint of nitric acid 42° Be per 100 gallons of bath will lower the pH approximately 0.1 pH unit.

SECTION 5: HANDLING and STORAGE**CAUTION**

Solutions of **Martron C-10-L** are strongly acidic. Operators should wear protective equipment such as rubber gloves, chemical safety goggles and apron. Especially when making additions to the bath.

In case of contact with skin, flush with large amounts of water. For eye contact, flood with water and obtain immediate medical attention.

STORAGE

Martron C-10-L contains chromatic acid, a strong oxidizer. Contact with wood, paper, rags, organic materials (especially solvents) may cause spontaneous combustion or render these materials dangerously flammable.

FREEZABILITY

As with most chemical products, it is preferable that freezing be avoided. However, if freezing should occur during transportation or storage, directions for handling the products covered in this technical data sheet are as follows:

If **Martron C-10-L** freezes, warm to 95-105°F/35-41°C in a warm water bath. Thoroughly mix until precipitates are completely dissolved.

SECTION 6: NON-WARRANTY

The data contained in this bulletin is believed by **Martron Inc.** to be accurate, true, and complete. Since, however, final methods of use of this product are in the hands of the customer and beyond our control, we cannot guarantee that the customer will obtain the results described in this bulletin, nor can we assume responsibility of the use of this product by the customer in any process which may infringe the patents of third parties.