



PRODUCT INFORMATION

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DATE: JANUARY 28, 2005

REVISED: MAY 2017

EMERGENCY - MARTRON 704-289-1934

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REF. # MFC-001528

MARTRON SIX PLUS-LY-DYE

Dye for Trivalent Passivate Conversion Coating

Section 1: PRODUCT DESCRIPTION and FEATURES

Martron Six Plus-LY-Dye is a liquid dye additive for use in combination with heavy film building trivalent chromates to provide a yellow film on zinc-plated parts.

Martron Six Plus-LY-Dye can be added to the trivalent chromate as single step, one tank operation, or as a post-dip dye application.

- Yellow color comparable to traditional yellow hexavalent chromates
- Does not contain hexavalent chromium
- Liquid product allows for easy additions
- Can be added directly to the chromate solution
- Will meet GME00252 and GMW3044

Section 2: SAFETY PRECAUTIONS

Always read and understand the Safety Data Sheet (SDS) for any chemical product prior to using the product to ensure familiarity with the methods of safe handling and health hazards associated with **Martron Six Plus-LY-Dye**.

Section 3: MAKE UP and MAINTENANCE OF MARTRON SIX PLUS-LY-DYE

Equipment:

Tanks and auxiliary equipment should be constructed of Koroseal, polyethylene or PVC lined mild steel, stainless steel, or PVC.

Agitation is recommended using clean, oil-free air supplied from PVC air lines or mechanical agitation is acceptable.

Solution Make Up:

Post-Chromate Dye Application:

	Optimum	Range
Martron Six Plus-LY-Dye	1.5% (vol)	1 – 2% (vol)

Make Up Procedures:

- Fill the tank approximately 70% with clean water
- With continuous mixing, add the required amount of **Martron Six Plus-LY-Dye**
- Add sufficient water to bring the solution up to working level and mix thoroughly
- If necessary, heat the solution to ambient temperature

Operating Conditions:**In Single Step, Single Tank Application:**

Martron Six Plus-LY-Dye USED AS A SINGLE DIP PRODUCT IN SITU WITH THE TRIVALENT PASSIVATE IS NOT RECOMMENDED DUE TO THE BREAKDOWN OF THE DYE.

However, if necessary, to use **Martron Six Plus-LY-Dye** in the chromate passivate, add 1 to 2% by volume directly to the chromate bath.

Martron Six Plus-LY-Dye will slowly break down under the acidic conditions of the chromate solution. Periodic additions of approximately 0.15% by volume will be required to maintain the desired color. Additions will also be necessary after shutdown periods. *It is important to maintain the pH of the chromating solution above 1.8 in order to minimize dye breakdown.*

In Post-Chromate Dye Applications:

Martron Six Plus-LY-Dye is used by adding 1 to 2% by volume to clean tap water. After the clear chromate has been applied, the parts should be thoroughly rinsed and immersed in the dye solution for 60 to 120 seconds.

Do not allow the parts to dry prior to immersion in the dye solution. The parts should be dried as completely as possible before handling.

Process Control:

Solution maintenance is a function of drag out and soil contamination, and varies by application. Solution concentration is determined by appearance of the work. To restore color, add **Martron Six Plus-LY-Dye** back at a rate of 0.15% by volume until the desired color is achieved at the correct process time.

Section 4: WASTE TREATMENT

Consult appropriate Federal, State, and local regulatory agencies to ascertain proper disposal procedures. Do not discharge into waterways or sewer systems. Disposal will depend on the nature of waste material.

Section 5: STORAGE

Avoid freezing of the **Martron Six Plus-LY-Dye**. Store **Martron Six Plus-LY-Dye** in an appropriate area with compatible materials. All chemicals should be stored in compliance with all applicable federal, state or local requirements.

Section 6: NON-WARRANTY and DISCLAIMER

The data contained in this bulletin is believed by **Martron Inc.** to be true, accurate and complete. Since the final methods of use of this product are in the hands of the customer, and beyond **Martron Inc.'s** control, **Martron Inc.** cannot guarantee that the customer will obtain any specific result. Accordingly, **Martron Inc.** does not assume any responsibility for the use of this product by the customer, the results obtained, nor the infringement of any patents of third parties.