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

**REF. # RES-010728** 

# MARTRON DEEP BLACK DYE MLW

Aluminum Dye

#### 1. Description

Martron Deep Black Dye MLW is a multi-component, water soluble dye, used to color anodized aluminum black.

An industry standard for over 25 years. Excellent light fastness Hard coat compatible RoHS compliant

#### 2. Application Instructions

**Indoor Applications Outdoor Applications** Concentration: 9-11 g/l 12-14 g/l 4.5-5.2 4.5-5.2 pH: Buffering: Not required Not required 140°F ±5°F/60°C 140°F ±5°F/60°C Temperature: Coating thickness: 0.60 mils. or greater 0.80 mils. or greater Dye time: 10-15 minutes 20-30 minutes Matron Ni Acetate Sealer **Matron Ni Acetate Sealer** Preferred sealing: **Martron Sealant Martron Sealant** 

#### 3. Conditions for Using Martron Deep Black Dye MLW

Tank: Stainless steel or other acid resistant materials such as neoprene, polyethylene and

polypropylene that can withstand a constant operating temperature of 140°F.

Water quality: Deionized

pH adjustments: Raise with sodium hydroxide.

Lower with acetic acid.

The pH should be checked once per shift with a calibrated meter and maintained within

recommended range.

Bath agitation: Moderate agitation must be used for high uniformity of color.

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Rinsing:

It is important to remove all acid residues clinging to the work and acid retention in the oxide pore itself. Rinse work load thoroughly after anodizing. A minimum of two rinses is recommended, with the second rinse at over-flow.

To increase rinsing effectiveness, add vigorous air agitation in all rinse tanks. This also improves your rinsing of surfaces on complicated shaped parts.

## 4. Light Fastness

Rating: 8 (1=poor, 8=excellent)

## 5. Storage

Shelf life is virtually unlimited.
Store in original container in a cool dry location.
Close package tightly after removal of dye.
In humid environments, dye powder may clump-up.

### 6. Preparation of A New Dye Bath

- 1. A cleaned tank is filled with deionized water to about 75% of final volume and raised to dyeing temperature.
- 2. The required amount of dye is weighed out and dissolved in hot deionized water (160°-180°F) in a separate container until a slurry is formed. This is your stock solution.
- 3. With agitation turned on in tank, pour stock solution into tank.
- 4. Top off the tank to final working solution volume with hotter deionized water and agitate for 15 minutes.
- 5. Using a calibrated pH meter, check the pH and adjust if necessary.
- 6. The dye bath is brought to dyeing temperature,  $140^{\circ}F \pm 5^{\circ}F$ .

#### 7. Conversion Factor

Converting grams per liter (g/l) to ounces per gallon (oz/gal)

 $g/l \times 0.134 = oz/gal$ 

## 8. Product Safety

We recommend that the company/operator read and review the Safety Data Sheet (SDS) for the appropriate health and safety warnings before use.

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