



# PRODUCT INFORMATION

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EMERGENCY - MARTRON 704-289-1934  
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REF. # MFC-001523

## MARTRON AL10C

### 1. Description

**Martron AL10C** is a QPL approved and listed powdered chemical used to form a protective conversion coating on aluminum surfaces which minimizes corrosion and provides an improved bond for painting.

QPL Number 81706  
Mil-C-5541  
Document ID Mil-DTL-81706B, Type I, Class 1A, Form II, Method C  
Document ID Mil-DTL-81706B, Type I, Class 3, Form II, Method C

### 2. Application Instructions

To ensure a uniform coating, the aluminum surface must be clean and deoxidized.

	<u>Class 1A</u>	<u>Class 3</u>
Concentration:	1.5-2.0 oz/gal	0.30-1.0 oz/gal
pH:	1.4-1.9	1.9-2.6
Temperature:	65° - 80°F	65° - 80°F
Immersion time:	2-4 minutes	1-3 minutes

### 3. Conditions for Using Martron AL10C

Tank:	Tanks should be made of stainless steel, polyethylene, PVC or equal.
pH adjustments:	Lower with nitric acid-67% (42 Baume). Raise with dilute ammonium hydroxide. Avoid quick additions.
Agitation:	Moderate agitation improves coating uniformity.
Rinsing:	Drag in of acid or alkaline material is detrimental to the <b>Martron AL10C</b> solution. Ensure rinsing prior to the passivation step is thorough.
Drying:	Drying is accomplished by clean air blast, centrifuge or warm circulating air. Avoid temperatures exceeding 140°F. Setting or hardening begins immediately after drying. Allow 24 hours of hardening time prior to wrapping or corrosion resistance testing to ensure consistent results.

#### 4. Solution Make-up

1. Fill tank  $\frac{3}{4}$  full with water.
2. Add the required amount of **Martron AL10C** while stirring.
3. Add remaining water to final volume.
4. Adjust solutions pH if necessary.

#### 5. Titration Procedure

Reagents:           0.1N sodium thiosulfate  
                          50% sulfuric acid  
                          10% potassium iodide solution  
                          1% starch indicator

Procedure:           1. Pipette 10-ml of sample into a 500 Erlenmeyer flask.  
                          2. Dilute 10-ml sample with water to 250 ml mark.  
                          3. Add 10-ml of potassium iodide solution.  
                          4. Add 5-ml of sulfuric acid.  
                          5. Titrate with 0.1N sodium thiosulfate to a light-yellow color.  
                          6. Add 2-ml starch indicator.  
                          7. Continue titration drop by drop with constant stirring until solution turns clear.

Calculation:         ml of sodium thiosulfate x .08 = oz/gal **Martron AL10C**

#### 6. Storage

Store in original container in a cool dry location.  
In humid environments, powder/granule will harden.  
Keep away from flammables and acids.

#### 7. Packaging

10 lbs. and 100 lbs.

#### 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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