PRODUCT INFORMATION

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EMERGENCY - MARTRON 704-289-1934
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REF. # MFC-005005

MARTRON 700-EE

1. Description

Martron 700-EE is a unique liquid additive for higher temperature Type III anodizing.

Hard coat at 60°F
Requires less refrigeration, thus savings on chilling energy cost.
Complies with Military Specifications for Type III hard coat anodizing.
Improves the uniformity of film thickness throughout the entire anodizing tank.
Virtually eliminates burning.
Will not yellow or stain the coating.
Parts will be clearer in appearance.
The dye-ability of hard coat films is improved.

2. Application Instructions

Use of **Martron 700-EE** to produce 2.0 mils, “Hard coat” anodic oxide coatings.

Martron 700-EE concentration:	3%-4% by volume
Sulfuric acid concentration:	170-190 g/l
Dissolved aluminum concentration:	5-15 g/l
Temperature:	50°-60°F
Current:	24-48 ASF

3. Titration Procedure

Reagents

0.1N ferrous ammonium sulfate (FAS)
50% sulfuric acid
Ferroin indicator
0.1N ceric sulfate solution

Procedure: Step 1 of 2 (standardization)

1. Pipette 25-mls of the 0.1N ferrous ammonium sulfate into a 400 ml beaker.
2. Add 100-mls of distilled water.
3. Add 25-mls of 50% sulfuric acid solution.
4. Add 4 drops of ferroin indicator.
5. Titrate with 0.1N ceric sulfate solution until the orange color disappears.

Calculation: mL of ceric sulfate = "F" 25

Note:

FAS solution should be discarded if the amount of 0.1N ceric sulfate solution required for this titration is less than 15 milliliters.

Procedure: Step 2 of 2 (anodize bath analysis)

1. Pipette 10-mls of the anodizing solution into a 1-liter volumetric flask.
2. Add deionized water to the 500-ml mark and mix well
3. Pipette 25-mls of the dilute solution into a 400-ml beaker.
4. Add 25-mls of 50% sulfuric acid.
5. Using a pipette, accurately add 25-mls of 0.1 ceric sulfate solution.
6. Add 2-3 pieces of glass bead and boil 10-15 minutes.
7. Cool and add distilled water to the 200-ml mark.
8. Add 4 drops of ferroin indicator and titrate to an orange end point with 0.1N FAS. Record ml of FAS as “A”.

Calculation:

$$\frac{25 - (A \times F)}{2.67} = \%\ \text{by volume}\ \textbf{Martron 700-EE}$$

4. Storage

Store in original container in a dry location.

5. Packaging

5 gallons
55 gallons

6. 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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