



PRODUCT INFORMATION

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MARTRON AID-3

Anti – Oxidant Protective Process for Iron and other base metals

1. PROCESS AND DEPOSIT DESCRIPTION

General Description

Martron AID-3 is a specially formulated liquid concentrate used to protect Iron and other alloys from corrosion after cleaning, pickling, electroplating and bright dipping.

Martron AID-3 can be used in decorative trivalent chromium applications to inhibit the oxidation of non-plated areas (ie the inside of tubes).

Martron AID-3 is easily applied in a final hot water rinse.

Martron AID-3 does not produce a film so it is excellent for parts that are subsequently painted.

2. MAKE-UP and MAINTENANCE OF THE PLATING BATH

Make-up

Gloves and protective glasses must be used for the make-up of **Martron AID-3** solutions.

If the water is particularly hard (over 35°F) demineralized water is recommended - especially if used after decorative trivalent chromium.

Per 100 Gallons	
Martron AID-3	3-5 gallons
Water	To final volume

- Fill the bath tank 1/3 of the final volume with water;
- Add the required amount of **Martron AID-3** and mix well,
- Top to final volume with water.

Equipment

The use of PVC lined steel or polypropylene tanks is advised.

The heating can be made directly with dipping heaters made of inox steel or pyrex.

Operating Conditions

Parameters	
Concentration (1)	30 – 50 ml/l in water (3-5%)
Solution (2)	8.0 – 10.5
Solution temperature (3)	30 - 60°C (86-140°F)
Dipping time (4)	30 – 60 seconds
Drying time (5)	6 – 12 minutes
Drying temperature (6)	50 - 90°C (122-194°F)
Consumption per 100 m ² (7)	2.0 ÷ 3.0 l. (1 gal per 1,250-2,000 ft ²)

(1) Concentration may vary. The higher the concentration the higher the protective effect. We recommend lower concentrations with more frequent make-up than higher concentrations with less frequent make-up.

(2) The pH does not need to be constantly controlled but can be used to indicate the solution conditions and the product consumption.

(3) Higher temperatures accelerate the neutralization and improve drying.

(4) The dip time must be long enough to allow a minimum of 30 seconds contact with the entire part (ID and OD)

(5) – (6) The drying time and temperature is directly related: the higher the temperature the shorter the time that is necessary to achieve a complete polymerization. Proper ventilation is always recommended.

(7) The consumption is mainly dependent upon drag-out. When white stains appear, the solution must be replaced.

Analytical control

Analytical methods are available from **Martron Inc.**

3. PLATING SEQUENCE

Martron AID-3 should be applied after proper rinsing to pickled and/or cleaned objects. Objects should be wet, but the amount of drag-in controlled to extend bath life.

Adequate rinsing is fundamental to prevent oxidation on uncovered areas of Nickel and Trivalent Chromium plated objects.

For tubular parts, we recommend a minimum of two (2) cold water rinses, before the **Martron AID-3** containing hot water rinse. A drying station is also critical.

For completely coated items, three (3) cold water rinses (the last containing **Martron AID-3**) followed by a dry stage should be sufficient.

4. WASTE WATER TREATMENT

Martron AID-3 solutions and subsequent rinse tanks are mildly alkaline and should be neutralized prior to discharge to a chemical sewer.

5. HANDLING and STORAGE

Safe Handling

The preparation, maintenance, and disposal of **Martron AID-3** solutions require the handling of alkaline solutions. Avoid contact with the skin and eyes. Wear protective clothing and safety gear. In the event of any contact, flush

affected area with a large volume of cold water and contact a physician, if necessary.

Please review appropriate **Martron AID-3** SDS.

Storage

Martron AID-3 requires no special storage considerations other than it should be kept away from damp or wet areas or heat sources. We recommend checking the use-by date on the label and on the C of A.

6. WARRANTY

The data set forth in this bulletin is believed by **Martron Inc.** to be true, accurate, and complete, but is not guaranteed. Our sole warranty is as stated in our Standard Terms and Conditions of Sale. We cannot warrant that our customers will achieve the same results from any process, chemical or product described in this bulletin because we do not have control over the conditions of use; nor can we assume any responsibility for our customer's use of any of our products in a manner which infringes the patents of third parties.