



Product Bulletin

Better Chemistry. **Better Business.**

Mi-Tique® Green

Product Code: 2300005
Revised Date: 04/25/2006

Mi-Tique® Green

Room Temperature Antiquing Solution Used To Produce Antique Verdi-Green And Blue Finishes On Copper, Brass And Bronze Surfaces

SOLUTION MAKEUP

Mi-Tique® GREEN liquid concentrate is used full strength or diluted with water to produce a natural verdi or patina green or bluish colors on copper alloys.

Prior to charging a production tank, some experimentation should be done with properly prepared sample parts, using various dilutions and immersion times to determine the conditions required to produce the desired color. Bluish finishes are obtained with no dilution of the concentrate or with dilutions of up to one (1) part concentrate to two (2) parts water and immersion times of one (1) to three (3) minutes. Greenish shades are developed by using dilutions of three (3) or more parts water and immersion times of 1 to 3 minutes.

Antique finishes may be protected with a light lacquer top coat. The ultimate color will be influenced and enhanced by the top coat and it must be applied before judging the depth of color or before comparing with other antique finishes. The natural color of the alloy and the mechanical finish on the surface will also affect the final color.

FINISHING PROCEDURE

1. Thoroughly clean and degrease pieces with Hubbard-Hall/Mitchell-Bradford Mi-Clean 17 or Mi-Clean 100, heavy-duty low temperature (65-140 F.) alkaline soak cleaner. A typical cleaning time is 5 to 10 minutes. Mi-Clean 24, an acidic cleaner used at 10% by volume in water, may also be used to clean and deoxidize in one step.

Large architectural panels and objects should be cleaned by belt sanding, glass bead or sand blasting or with other abrasive media.

2. Rinse small objects in a bottom-fed, overflowing cold water rinse. Large objects with water spray.
3. Immerse pieces in the Mi-Tique® Green solution for one (1) to three (3) minutes. If dip baskets are used, the parts should be agitated when first introduced into the solution to break air bubbles and to assure solution contact with all surfaces.



Product Bulletin

Better Chemistry. **Better Business.**

Mi-Tique® Green

Product Code: 2300005
Revised Date: 04/25/2006

4. Remove pieces from the Mi-Tique® solution and allow them to air dry without rinsing. Forced warm air drying will affect the color development. The higher the drying temperature, the greener the color produced.
5. Immerse part in boiling water for 1-2 seconds. Allow the part to air dry. The color is greatly enhanced by this quick dip.
6. Brush surfaces lightly to "highlight" or produce an antiqued finish.
7. Seal the finish with a light acrylic lacquer.

EQUIPMENT

The Mi-Tique® tank should be constructed of stainless steel or rigid polypropylene. Cleaning and rinse tanks may be constructed of mild steel. Racks, hooks and baskets should also be constructed of stainless steel or polypropylene. Non-ferrous metals such as galvanized iron, bronze, copper, tin or aluminum should not be used as these materials will contaminate or deplete the Mi-Tique® solution.

Hot alkaline cleaning and the Mi-Tique® solutions must be exhausted. The duct work may be of stainless steel, polypropylene or PVC. Galvanized steel should not be used.

CAUTION

The **Mi-Tique® Green** solution contains ammonium hydroxide. It may cause severe burns. Do not get in eyes, on skin or clothing. Do not take internally. Wear eye protection, (glasses, goggles, or face shield), protective gloves and rubber apron when mixing solution and while working with the solution. Gas proof goggles are the preferred eye protection.

In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes. For eyes, call a physician.

When withdrawing **Mi-Tique® Green** concentrate from shipping container, be sure to work in an area with forced ventilation.

Avoid contact of **Mi-Tique® Green** concentrate and working solutions with acidic materials or other alkaline materials. Do not mix **Mi-Tique® Green** with any other chemicals or solutions.

Read and understand OSHA safety data sheet and drum warning labels prior to working with or handling this product.



Product Bulletin

Better Chemistry. **Better Business.**

Mi-Tique® Green

Product Code: 2300005
Revised Date: 04/25/2006

CAUTION

The Mi-Tique® solution is mildly acidic. Avoid contact with eyes, skin and clothing. Wear eye shields, protective gloves and aprons. The solution is toxic if taken internally. Read and understand OSHA safety data sheet and drum warning labels prior to working with or handling this product.

WARRANTY

THE QUALITY OF THIS PRODUCT IS GUARANTEED ON SHIPMENT FROM OUR PLANT. IF THE USE RECOMMENDATIONS ARE FOLLOWED, DESIRED RESULTS WILL BE OBTAINED. SINCE THE USE OF OUR PRODUCTS IS BEYOND OUR CONTROL, NO GUARANTEE EXPRESSED OR IMPLIED IS MADE AS TO THE EFFECTS OF SUCH USE, OR THE RESULTS TO BE OBTAINED.