



Metal Finishing Systems

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## ANTIQUÉ BLACK® M20 Oxidizing Solution

### Operating Instructions

#### PRODUCT DESCRIPTION

ANTIQUÉ BLACK® M20 oxidizer is a general purpose browning and blackening solution for use on copper, brass & bronze surfaces, and works on both solid and electroplated parts. Supplied as a liquid concentrate, the product is diluted with water to make up an immersion solution that operates at room temperature to produce medium-dark browns and black finishes. The finish can be highlighted for pleasing antique black, brown or US10B finishes.

#### OPERATING CONDITIONS

Bath Make-Up Concentration	20-25% by volume for dark brown and black finishes.
Operating Temperature	10-15% by volume for lighter brown shades.
Equipment Construction	Room Temperature
Ventilation	Acid-proof tank: plastic or PVC lined.
Filtration	None required. No fumes. Desirable for production-scale tanks. Use acid-proof pump and 50-100 micron polypropylene filter element.

#### PARTS PROCESSING GUIDELINES

1. **CLEAN** and degrease the parts for five minutes in SAFE SCRUB® M Multi-Metal liquid cleaner, mixed at 10-20% by volume; 100-140° F. Or, use bead blast techniques.  
OR, electroplate parts, applying a minimum thickness of 0.0002".
2. **RINSE** in clean water tank for 20 seconds, to remove cleaner/plating residues.
3. (Optional) **REMOVE TARNISH** and neutralize residual plating cyanide by immersing parts in 5% sulfuric acid or sulfuric acid salts; Room Temp; 1 minute. **RINSE** in clean water for 20 seconds.

4. **OXIDIZE SURFACE** by immersing parts in ANTIQUE BLACK M20 solution for 1-3 minutes or as long as needed to produce the desired color. Agitate parts gently to assure solution contact with all surfaces.
5. **RINSE** in clean water tank for 20 seconds.
6. **DRY** the parts and **APPLY LACQUER**. Or, **HIGHLIGHT** the finish with an abrasive or polishing wheel or in a vibratory finisher. **APPLY PROTECTIVE TOPCOAT**, such as clear lacquer, wax or oil. Note: the topcoat will enhance and darken the color of the finish as it is absorbed. The final color should be judged after the topcoat is applied.

### **BATH MAINTENANCE**

The M20 bath can be operated as a permanent bath in the process line and is controlled by total acid titration, or by using the CCK Test Kit (available from BIRCHWOOD CASEY). Other methods, such as total acid titration or Atomic Absorption (with a selenium lamp) may also be used. Maintain the bath strength at 80% of original make-up or higher. Keep tank covered when not in use to minimize contamination and evaporation.

***Before Using This Product – Please Read, Understand and Follow all the Precautions shown on the Product Label and on the Material Safety Data Sheet.***

**The Material Safety Data Sheet can be found on our website: [www.birchwoodcasey.com](http://www.birchwoodcasey.com)**

**Always Apply Appropriate Labels to any Container used to Store or Apply this Product.**

**PACKAGING:** 1 and 5 gallon containers; 15 and 55 gallon non-returnable drums. Store in closed containers.

**NOTE:** The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, Birchwood Laboratories, Inc. makes no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for a particular purpose. Accordingly, Birchwood Laboratories, Inc. will not be responsible for damages of any kind resulting from the use of or reliance upon such information.

ANTIQUE BLACK® M20 (Product Numbers: 720050, 720051, 720052, 720058)

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