

B/Ox™ 324

Room Temperature Blackening/Antiquing Swab-On Finish for Brass, Bronze and Muntz Metals

B/Ox 324 is an instant-acting swab-on/touch-up chemical conversion finish for copper and its alloys. The color produced can be varied from light brown to brown to black.

FINISHING PROCEDURE SMALL AREAS AND SCRATCHES

1. Degrease areas to be finished with alcohol, chlorinated solvents, a liquid detergent or with **E-Kleen 163** neutral spray bottle cleaner. Do not use petroleum-based solvents. Let the cleaner work 1-3 minutes.
2. Rinse with running water, damp cloth or damp sponge if a liquid detergent or **E-Kleen 163** was used. If water spotting occurs during rinsing, try using **E-Kleen 163** again. Water spotting means the substrate is not clean.
3. Remove any surface oxide present with a steel scribe for narrow scratches, steel wool or abrasive paper for wider areas.
4. Rinse with running water, a damp cloth or a damp sponge.
5. Apply full strength **B/Ox 324** solution generously with cotton swab, sponge or brush using a light rubbing action. Use care to ensure a smooth and even coverage. Allow the chemicals to react for 30 to 90 seconds. The depth of color is controlled by the length of time the solution is left in contact with the metal surface. If a light brown color is preferred, the **B/Ox 324** concentrate may be diluted with 1 to 3 parts of water prior to application.
6. Rinse with running water, damp cloth or damp sponge.
7. Allow to dry or force dry.
8. Polish area with a soft cloth or brush to remove the non-adherent layer of spent chemicals from the surface.
9. Repeat steps 5, 6, 7 and 8 if a darker color is desired.
10. To enhance the depth of color and impart corrosion resistance the finish must be sealed with one of **EPI's E-Tec** brand of corrosion inhibitors. **E-Tec 502** will leave a slightly oily finish, **E-Tec 505** a soft, non-tacky dry finish, **E-Tec 520** a hard clear acrylic finish and **E-Tec 521** a clear hard wax finish.

FINISHING PROCEDURE LARGE AREAS OR JOB SITE APPLICATION

1. Thoroughly clean and degrease area to be finished with a liquid detergent or **E-Kleen 163** neutral spray bottle cleaner (let the cleaner work for 1-3 minutes) or abrasively clean to bare metal by belt sanding, glass bead or sand blasting the surface. Lacquered or heavily oxidized surfaces must be abrasively cleaned.
2. Rinse with running water, a damp cloth or damp sponge to remove residual cleaners, blasting or sanding dust. If water spotting occurs during rinsing, try using **E-Kleen 163** again. Water spotting means the substrate is not clean.

3. Apply full strength **B/Ox 324** if a black or blackish-brown finish is desired. Dilute **B/Ox 324** with 4 to 8 parts water if a light statuary brown is desired. Apply the solution generously with a brush, cloth or sponge. Allow chemicals 30 to 90 seconds to complete their reaction. Do not allow the solution to puddle when working with horizontal surfaces. A uniform finish is easily obtained on large areas by repeatedly going over the entire surface with a sponge, saturated with the **B/Ox 324** solution - distributing the solution over the entire surface on each pass. With wide vertical surfaces, it is recommended that sponges be attached to a board as wide as the area to be finished. The sponges are then saturated with the **B/Ox 324** solution and the solution is applied to the surface by beginning at the top and drawing the sponged board down evenly over the entire surface - repeating for 2 - 4 times depending upon the color desired.
4. Rinse with running water or with a damp sponge. Hot water accelerates drying. Several passes with a damp sponge are recommended to even-out the finish and to remove residual chemicals.
5. Allow to dry, wipe dry or blow dry with compressed air.
6. Repeat step 3, 4 and 5 if a darker finish is desired.
7. A variety of attractive antiqued or "highlighted" finishes are produced by buffing or scratch brushing with abrasive pads.
8. A protective topcoat should be applied to enhance the color and impart corrosion resistance and abrasion resistance. For a clear, hard acrylic finish apply **E-Tec 520**.

Note: The ultimate appearance and color of "highlighted" finishes will be influenced by the natural color of the substrate (i.e. the alloy used) and the mechanical finish on the substrate before finishing. Do not judge the final color until the protective topcoat has been applied. A non-adherent or spotty finish indicates improper degreasing, incomplete oxide removal or surface contamination.

CAUTION

The **B/Ox 324** solutions are mildly acidic. Avoid contact with eyes, skin and clothing. Wear eye shields, protective gloves and apron when preparing solutions and while working with the solutions. Do not mix the **B/Ox 324** solutions with alkaline materials, cyanide containing materials, or any other chemical substances. The **B/Ox 324** solutions are toxic if taken internally. Do not work with the **B/Ox 324** solutions without first reading and understanding the **SAFETY DATA SHEET** furnished by **EPI**.

PACKAGING

One (1), five (5) and 55-gallon non-returnable containers.

IMPORTANT NOTICE! For Industrial Use Only

The following is made in lieu of all warranties, expressed or implied, including the implied warranties of merchantability and fitness for purpose: sellers and manufacturers only obligation shall be to replace such quantity of the product as proved to be defective. Before using, user shall determine the suitability of the product for its intended use, and user assumes all risk and liability whatsoever in connection therewith. **Neither seller nor manufacturer shall be liable either in tort or in contract for any loss or damage, direct, incidental or consequential, arising out of the use or the inability to use the product.**

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