

B/OX™ 318

Room Temperature Rust Patina/Sienna Brown Oxidizing/Antiquing

B/OX 318 is a ready to use oxidizing solution that produces a rust patina (orange-yellow-brown) oxidized appearance. To accomplish this, the **B/OX 318** is sprayed on or by immersion depending on the overall appearance. The most natural looking finishes are produced by first treating the copper and brass surfaces with **B/OX 311** to produce a chocolate brown. The subsequent **B/OX 318** finish will adhere better to the brown finish than it will to bare copper or brass surface.

Instructions

B/OX 318 solution is used at full strength at room temperature (65-85°F) by dipping or spraying. The color and depth of color are controlled by immersion time or the number of spray passes. Prior to starting production, some experimentation should be done with properly prepared sample parts to determine the conditions required to produce the desired finish. As a starting point, use the **B/OX 318** full strength for dipping or spraying. First utilize the **B/OX 311** to achieve a chocolate brown. For dipping, immerse the parts in the **B/OX 318** at full strength for 1 to 3 minutes. For spraying, use at full strength and spray until the part surface is completely wet. To soften the appearance of the **B/OX 318** dilute one part **B/OX 318** with one part water.

Finishing Procedure

1. Thoroughly clean and degrease pieces with **EPI's E-Kleen 148-E** or **E-Kleen 110**, heavy-duty, low temperature (65 to 140°F) alkaline soak cleaner. A typical cleaning time is 5 to 10 minutes. **E-Kleen 154**, 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. For large objects use a water spray.
3. Immerse pieces in **B/OX 311** solution for one (1) second to 3 minutes to produce a brown to dark brown finish. (See **B/OX 311** technical data sheet.) A heavy, porous

coating of **B/OX 311** is desirable because it will absorb and retain the **B/OX 318** solution.

4. Rinse with water. Optional drying of the parts results in a deeper rust patina.
5. Immerse pieces in the **B/OX 318** solution for one (1) to three 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. When spraying, coat the part surface until uniformly wet. After drying an additional spray coat may be necessary.
6. Remove pieces from the **B/OX** solution and allow them to air dry without rinsing. Optional forced warm air drying will affect the color development.
7. After drying, an optional cold water rinse may be required to remove residue chemicals.
8. Optional: Brush surfaces lightly to “highlight” or produce an antiqued finish.
9. Seal the finish with **EPI’s E-Tec 520** clear acrylic lacquer or **E-Tec 521** wax.

Additional Processing Information

1. For antiquing freshly plated surfaces, Step #1 can be eliminated. A thorough water rinse following plating must be used prior to Step #3.
2. Immersion time in the **B/OX** solution should be as short as possible for plated surfaces to avoid stripping the plate.

Equipment Requirements

The **B/OX 318** tank should be constructed of polypropylene or stainless 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 the materials will contaminate or deplete the solution.

Hot alkaline cleaning must be exhausted. The duct work may be of stainless steel, polypropylene or PVC. Galvanized steel should not be used.

Your **EPI** representative is available to assist you in selecting and installing the complete tank system required for the process.

Caution

The **B/OX 318** solution is mildly acidic. Do not get in eyes, on skin or on 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.

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

Avoid contact of **B/OX 318** concentrate and working solutions with strongly alkaline materials. Do not mix **B/OX 318** with any other chemicals or solutions.

Do not work with **B/OX 318** without first reading and understanding the **Material Safety Data Sheet** furnished by **EPI**.

Packaging

One (1), 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 warranties of merchantability and fitness for purpose: seller's and manufacturer's 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.**