

Oxidizing-Antiquing Room Temperature Processes

- B/OX** **Oxidizers for Brass, Bronze, Copper, Pewter, Tin, Silver, and Nickel.**
The **300** series of **B/OX** products gives the metal finisher a wide range of choices for color development in oxidizing various materials. The liquid concentrates are diluted with water and by varying the concentration and length of immersion, a range of colors will be developed.
- B/OX 311** 15% to 20% by volume solutions produce black to blackish-brown US 10B finishes on copper and brass with immersions of 1 to 3 minutes. Diluted 5% to 10% by volume solutions produce lighter flemish and statuary bronzes with 1 to 3 minutes of immersion. Desirable underlying red tones revealed upon highlighting the brown tones.
- B/OX 311 GEL** It is an instant-acting black chemical conversion/antique finish for all brass, bronze, and copper. Used at full strength to produce a black finish.
- B/OX 312** 20% by volume solutions produce more pronounced brown to chocolate-brown colors on copper and brass than **311**, with a richer reddish tone when highlighted. 1 to 3 minute immersions. Desirable underlying red tones revealed upon highlighting the brown tones.
- B/OX 312 GEL** Room Temperature Oxidizing/Antiquing Gel for Brass, Bronze, and Copper via Swab-on or Brush. It is an instant-acting brown chemical conversion/antique finish for all brass, bronze, and copper. Used at full strength to produce a black finish. To enhance the depth of blackness and impart corrosion resistance, the finish must be sealed with one of EPI's E-Tec brand of corrosion inhibitors.
- B/OX 313** Used at the same dilutions as **311** and **312** with copper and brass, but the highlighted finishes do not exhibit any underlying red tones. Also used to blacken **silver** and **nickel**.
- B/OX 314** Similar in action to **312** but slower acting while producing warmer and richer brown tones of varying intensity to include deep walnut browns on brass and bronze.
- B/OX 315** It has a very wide operating window in regard to concentration to produce light brown to chocolate-brown colors on copper and brass. It does not produce as much smut or rub-off as other oxidizing solutions. Concentration is 10 to 20% in water.

B/OX 316 & 316A A natural **verdi-green** is produced on copper and brass with immersion times of 1 to 3 minutes. Liquid concentrate is diluted with 3 parts water. It is applied over **B/OX 311**.

B/OX 316 GEL A liquid concentrate is used full strength or diluted with water to produce natural Verdi or patina green or bluish color on copper and copper alloys. Use the **B/OX 316 GEL** at 100 % by volume to 50% by volume diluted with water to try and achieve your color. The viscosity of **B/OX 316 GEL** produces a thicker patina coating than others. Immersion time is ½ minute to 3 minutes.

B/OX 324 Instant acting swab-on/touch-up chemical conversion finish for copper and its alloys. Color can be varied from light brown to brown-to-black.

B/OX 325 Blackens pewter with 1 to 5 minute immersions in a full strength **B/OX 325** solution or with dilutions at up to 5 parts water.

B/OX 327 10% to 20% by volume solutions produce colors from brown to purple, grey to black, and gun metal blue. Color development depends upon the metal substrate, immersion time, and solution concentration. It is used on copper, brass, bronze, white metal, silver and tin/lead alloys.

B/OX 329 produces light brown, gray, purple and black/pewter colors on brass and copper. The **B/OX 329** has a wide operating window and does not produce as much smut compared to other oxidizing solutions. The liquid concentrate is diluted with water and by varying the concentration and length of immersion a range of colors will be developed.

Simulated Antique Brass Finishes are produced on steel by blackening with **EPI's Insta-Blak 333** and on zinc by blackening with **EPI's Insta-Blak Z-360** followed by straight-line highlighting or relieving (scratch buffing) the blackened surface and then topcoating with a transparent gold lacquer.

Simulated Pewter Finish on Aluminum is produced by blackening the aluminum with **EPI's Insta-Blak A-380** or **A-385**, highlighting or relieving the blackened surface in a burnishing barrel or vibratory finishing mill and then topcoating with satin clear lacquer.

Simulated Pewter on Zinc is produced by blackening the zinc with **EPI's Insta-Blak Z-360** followed by burnish relieving the black finish followed with a topcoat of satin clear lacquer.

“Old English,” “Swedish Steel,” or “Old Iron” finishes on steel and cast iron by blackening with **EPI's Insta-Blak 333**, highlighting or burnishing the surface followed by a satin clear lacquer topcoat.