

Insta-Blak® S-334

Room Temperature Swab-On/Touch-Up Black Finish for Iron and Steel

It is an instant-acting black chemical conversion finish for all ferrous metals except stainless steel. **Insta-Blak S-334** is recommended for quick touch-up of scratched or damaged black oxide finishes or for blackening remachined black oxide surfaces. Products such as **Insta-Blak S-334** can be used to meet **AMS 2484A**. However, **EPI** does not perform testing on these products to verify conformance to this specification.

It is also used for swab-on finishing of prototype parts.

It produces no dimensional or structural change in the metal. It is an excellent layout fluid which is free from glare, with a very sharp line definition.

The finish is resistant to solvents, oils, cutting fluids, etc.

Finishing Procedure

1. Degrease the area to be refinished with alcohol, chlorinated solvents, vapor degreasing, a liquid detergent or **EPI's E-Kleen 163**, a room temperature soak cleaner. Do not use petroleum solvents. Let the cleaner work 1-3 minutes.
2. Rinse with running water, a damp sponge or damp cloth if a liquid detergent or **E-Kleen 163** was used. If water breaks occur during rinsing, try using **E-Kleen 163** again. Water breaks mean the substrate is not clean.
3. Remove any rust with steel wool or abrasive paper. A steel scribe works well for narrow scratches.
4. Apply full strength **Insta-Blak S-334** solution generously with a 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 seconds to 3 minutes. The depth of blackness is controlled by the length of time the solution is left in contact with the metal surface. The **Insta-Blak S-334** concentrate should be diluted with 1 to 2 parts water to slow down the blackening reaction when finishing large areas or prototype parts.
5. Rinse with running water, a damp cloth or damp sponge.
6. Allow to dry, wipe dry or force dry.
7. Rub area with a soft cloth or brush to remove the non-adherent layer of spent chemicals from the surface.
8. Repeat steps 4, 5, 6 and 7 if a darker finish is desired.
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. **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 wax finish. For architectural finishes use **E-Tec 520**, **E-Tec 521** and **RENWAX**.

The **Insta-Blak** finish in itself imparts very little corrosion resistance. However, its porous structure will absorb the sealant, promoting long term corrosion resistance. The depth of blackness will be enhanced as the sealant is absorbed into the finish and may require 24-hour aging.

A non-adherent or spotty finish indicates improper degreasing, incomplete rust removal or other surface contamination.

Acid resistant plastic containers must be used to contain **Insta-Blak S-334** solutions.

Caution

The **Insta-Blak S-334** 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 **Insta-Blak S-334** solutions with alkaline materials, cyanide containing materials, or any other chemical substances. **The Insta-Blak S-334 solutions are toxic if taken internally.** Do not work with the **Insta-Blak S-334** 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.**

12/4/2024