

E-Pik™, E-Prep®

Surface Preps, Activators, Acid Salts, Deoxidizers, Derusters and Etchants

- E-Pik 210** **Deoxidizer and smut remover for aluminum.** Liquid acidic concentrate is diluted with water at a concentration of 2 to 20% by volume and used at room temperature.
- E-Pik 211** **Acid salt** formulation used at room temperature to remove oxides and to activate the surface of **steel, stainless steel, zinc plate, die cast zinc, copper** and **copper alloys**. Used at 8 to 32 weight ounces per gallon of water.
- E-Pik 215** General purpose, **activator** and **deoxidizer** containing fluoride for use on **steel, copper, brass** and **zinc**. Used from ambient to 150°F at concentrations of 8 to 32 weight ounces per gallon of water.
- E-Pik 217-L** A mildly acidic liquid mixture, which works at room temperature to prepare copper surfaces for finishing with **EPI's** blackening, antiquing and electroplating processes. It is more moderate in its action than mineral acids and peroxide, and produces a defined etch profile and a very consistent surface area. It leaves a moderately passive surface resistant to rapid re-oxidation allowing for greater time flexibility for subsequent finishing operations.
- E-Pik 218** **Neutral Deruster.** It is a uniquely formulated liquid concentrate which is diluted with water to remove rust and scale from steel and cast iron. The product is used at a neutral and safe pH of 6.0 to 7.5 and operated at both room temperature and elevated temperatures. Used at 10 to 25% by volume water.
- E-Pik 219** A mildly acidic dry salt mixture, which works at room temperature to prepare copper surfaces for finishing with **EPI's** blackening, antiquing and electroplating processes. It does not produce the undesirable fumes given off from strong acids and no venting is required when used at room temperature.
- E-Pik 230** **Highly alkaline deruster for ferrous metals** used at 1 to 3 pounds per gallon of water at 180°F.
- E-Pik 232** **Aluminum etchant** with controlled etching rate to produce a satin finish. Used at 3 to 6 weight ounces per gallon of water and temperatures of 130° to 160°F.
- E-Pik 271** An inhibited acid concentrate used for rust and scale removal from steel and stainless steel.
- E-Pik 272** A highly alkaline scale and oxide remover for steel and stainless steel. It has strong oxidizing properties and is used as a hot solution by immersion to soften heavy heat treat and annealing scale, weld scale, etc. present on regular steel and stainless steel.

- E-Prep 221** **Stabilizer** for Peroxide/Sulfuric Acid based **brass bright dips**. It accelerates the brightening reaction and stops the breakdown of the peroxide. Liquid concentrate used at 5% by volume. It is water based and contains no methanol.
- E-Prep 222** A stabilizer similar to **E-Prep 221** but it is specifically formulated to work on leaded brass and tin/lead soldered surfaces where it leaves a more uniform finish than **E-Prep 221**.
- E-Prep 224** **Stabilizer and Additive for sulfuric acid/hydrogen peroxide bright dips for brass and copper** – It is a concentrated liquid stabilizer and anti-tarnish additive developed for the replenishment of **E-Prep 221** and **E-Prep 222** bright dip baths for brass and copper.
- E-Prep 224** can also be used with sulfuric acid and hydrogen peroxide to formulate customized bright dip baths to suit specific applications. It offers flexibility, reduced product inventory, and use cost savings.
- It does not contain any flammable solvents, chelators, chromates, or nitric acid so it is environmentally safe and easy to waste treat.
- E-Prep 224-LB** **Stabilizer and Additive for sulfuric acid/hydrogen peroxide descale and bright dips for leaded brass and copper** – It is a concentrated liquid accelerator, stabilizer and anti-tarnish additive developed for the replenishment of **E-Prep 222** bright dip baths for brass and copper.
- E-Prep 250** **Surface conditioner/activator** used prior to blackening **iron** and **steel** with **EPI's Insta-Blak** processes. It eliminates iridescent blue finishing on difficult to blacken **steel** surfaces. It enhances the depth of black. Also used as a combination light duty cleaner and activator for **steel** surfaces which have been sand or glass bead blasted or pre-cleaned in a vibratory unit. Liquid concentrate used at 10% by volume in water at 120° to 150°F.
- E-Prep 255** **Surface conditioner/activator** used prior to **EPI's Insta-Blak** processes on hardened micro finished **tool steels**. It enhances the depth of black. It has limited light duty cleaning capabilities. Liquid concentrate used at 10% by volume in water at 75° to 150°F.
- E-Prep 258** A universal steel surface conditioner and activator. It acts in the same manner as **E-Prep 250**, **252** and **255** with the added advantage that it will eliminate smut from smutty steels such as bar stock. It is used at 20% by volume in water at room temperature (65° to 80°F).
- E-Prep 270** **Stainless steel chemical brightening and passivation**. It is designed for use on 300 series stainless steel alloys and also other nickel bearing alloys such as Inconel and Kovar. It produces a uniformly smooth finish with good specular reflectivity. Either a matte or relatively bright finish can be obtained. The concentrated liquid is used at 100% by volume at 170 to 175°F with 5-to-15-minute immersions.
- E-Prep 280 NCZ** A non-cyanide liquid zincate for aluminum and its alloys. It is used for the surface preparation of aluminum surfaces prior to a non-cyanide alkaline

plating system such as **EPI's E-Brite 30/30**. It is used at 25% by volume in water at 60° to 85°F.

E-Prep B **Black pre-dip** prior to zinc phosphating steel surfaces with **EPI's E-Phos** phosphating processes. Liquid concentrate used at 9% by volume in water at room temperature.

E-Prep BL-100 **Burnishing Liquid** – It is a very effective, low foaming, burnishing liquid concentrate which is safe to use on all metals. It produces bright, clean surfaces on brass, copper, zinc diecast, bronze, steel and stainless steel during vibratory burnishing. It is clean rinsing and leaves no tacky residual film. Parts will resist retarnishing. It is used at 2 – 3% by volume in water at ambient temperature to 120°F.

E-Prep BL-110 **Burnishing Liquid** – It is similar in action to **E-Prep BL-100** and used on brass, copper, bronze, and steel. It is very effective when used with parts which are self-burnishing in rotating barrels. It is used at 0.5 to 1% by volume in water at ambient temperature to 120°F.

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