Electrochemical Products Inc.
17000 WEST LINCOLN AVE. / NEW BERLIN, WI 53151-2781
PH 262-786-9330 / FAX 262-786-9403

TECHNICAL DATA

E-Seal 1002 Interim

Sealer for Post forming High Corrosion Resistance for Zinc/Chromated Surfaces

E-Seal 1002 is a two component, high performance corrosion resistant polymer sealer that provides over 300 hours to white and 500 hours of salt spray protection to red rust when applied over zinc plated **(zinc plating thickness 0.0003")** parts in **E-Brite Ultra Alk** or **E-Brite Ultra Chlor** plating baths and chromated in **E-Chrome** hexavalent or **E-PASSivate** trivalent chromates. **E-Seal 1002-A** and **E-Seal 1002-B** are concentrated liquids that are diluted to 10-40% by volume with tap water.

Traditional silicate seals will immediately display white corrosion in salt spray testing after a part is plated and then formed.

E-Seal 1002 does not significantly change the thickness of the plated part, works over different chromate films and is utilized in the final dip.

E-Seal 1002 offers self-healing properties similar to a hexavalent chromate.

The end user can zinc plate a part and post form the part at a 90 degree bend. Perform salt spray. The first signs of white rust are typically 144 hours on post formed parts. Previously the white corrosion would happen in 2-24 hours.

Equipment

Tanks should be constructed of polypropylene, PVC, Koroseal lined carbon steel or stainless steel.

Solution Make Up

Fill the tank to 1/2 of the way with water. Carefully pour **E-Seal 1002 A** and **E-Seal 1002 B** to obtain the desired concentration – avoid spattering. **E-Seal 1002 A** and **E-Seal 1002 B** are added at a 1:1 ratio. Wear safety glasses, gloves and apron. Add water to working level.

	Range	Optimum
Concentration		
E-Seal 1002 A	10-40% by volume	20% by volume
E-Seal 1002 B	10-40% by volume	20% by volume
Temperature	65-80°F	70°F
Immersion Time	30-60 seconds	30 seconds

Processing Procedure

1. Zinc or cadmium plated surfaces
2. Thorough cold water rinse will prolong the life of chromate.
   a.) Optional 1% Sulfuric Acid to neutralize residual plating solution with barrel processed work.
   b.) Cold water rinse
3. Immersion in **E-Chrome** or **E-PASSivate** (see respective product data sheet).
4. Cold water rinse
5. **E-Seal 1002.** For optimum corrosion resistance the immersion time must be kept to a minimum. Maximum immersion time – 60 seconds.
6. Hot air dry. Optimum corrosion resistance will be obtained if the temperature of the hot air is kept below 150°F for hexavalent chromates.

Analysis is by refractive index: Refractive index X 4 = % of E-Seal 1002

Caution

This material is alkaline. Do not get in eyes, on skin or on clothing. Do not breathe mists. Do not take internally. When handling, wear goggles or face shield. While making up solutions, or adding to a solution, add slowly to surface of solution to avoid spattering. In case of contact immediately flush skin or eyes with plenty of water for at least 15 minutes. For eyes, call physician.

Do not mix **E-Seal 1002-A** and **E-Seal 1002-B** with acidic materials or any other chemical substances. **Do not** work with **E-Seal 1002-A** and **E-Seal 1002-B** without first reading and understanding the Material Safety Data Sheet furnished by **EPI**.

Packaging

5 gallon and 55 gallon plastic, non-returnable containers. Keep lid on when not in use.

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 all loss or damage, direct, incidental or consequential, arising out of the use or the inability to use the product.**

09/13/13