

E-Pik™ 210

Deoxidizer and Smut Remover for Aluminum

E-Pik 210 liquid acidic concentrate is mixed with water and used at room temperature to remove oxides from aluminum surfaces following cleaning and also for the removal of the smut formed on aluminum surfaces following etching. It is especially effective on aluminum alloys which contain silica. Aluminum surfaces will be brightened. It does not contain chromates.

Acid resistant polypropylene tanks or rubber lined steel tanks must be used with the **E-Pik 210** solution.

E-Pik 210 is used at a concentration of 2% to 20% by volume in water with the preferred concentration being 10%. Immersion times will vary from a few seconds to one or two minutes, depending upon the degree of oxidation present or the type of smut.

NOTE: Add **E-Pik** slowly to the water. **Do not** add water to **E-Pik 210**.

SOLUTION MAINTENANCE

Small periodic additions of the **E-Pik 210** are made to the solution to maintain the desired degree of activity. The solution is disposed of only when its effectiveness is reduced by the accumulation of dissolved metals, dirt, oil, grease, etc.

The strength of the solution may be determined by the following burette titration procedure.

1. Stir the bath from the bottom up for several minutes to obtain a uniform sample.
2. Pipette 10 ml of the bath into a clean 125 ml Erlenmeyer flask.
3. Add 25 ml of 8% by weight Sodium Gluconate solution to the **E-Pik 210** solution in the flask.
4. Add 8 to 10 drops of Phenolphthalein Indicator to the solution in the flask.
5. While swirling the solution in the Erlenmeyer flask, titrate the solution with 1.0N Sodium Hydroxide.
6. The end point will be indicated by a color change from yellow to bright pink.
7. Calculation:

% E-Pik 210 by volume = 1.190 x the number of ml of 1.0N Sodium Hydroxide used to titrate the solution.

DANGER

Contains acids . . . causes severe burns. Do not get in eyes, on skin or clothing. Wear goggles and protective clothing. In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes. For eyes, get medical attention.

Do not add water to contents while in shipping container because of violent reaction.

Avoid contact of **E-Pik 210** with alkaline materials.

Do not mix **E-Pik 210** with any other chemicals or solutions.

Before using **E-Pik 210**, the **MATERIAL SAFETY DATA SHEET** furnished by **EPI** must be read and the specific instructions and precautions followed to assure correct use and personal safety.

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: 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.**

5/12/98