



rbp chemical technology

150 S. 118th ST. • P.O. Box 14069
Milwaukee, WI 53214-0069
www.rbpchemical.com
corporate: 800-558-0747
fax: 414-258-7908

Product Data Sheet

Date: 05/18/98
Supersedes: 01/10/96
PRODUCT #: N8673

DEVADD 414

Developer Additive

DESCRIPTION: A liquid concentrate of unique ingredients designed to be added to generic potassium and sodium carbonate developing solutions. ***DEVADD 414*** will increase the life of developing solutions. It will increase the speed of development and will keep the speed more consistent through the life of the bath. Special ingredients in ***DEVADD 414*** help insure straight sidewalls and will help clean the "foot" of underdeveloped polymer. Other ingredients prevent scale build up in the equipment and reduce clean up time.

SPECIFICATIONS:

Density:	1.02 gm/ml, 8.5 lbs./gal.
Flash Point (TCC):	None
Shelf life:	Indefinite

INSTRUCTIONS: Add ***DEVADD 414*** at 2-3% by volume (2-3 gallons of ***DEVADD 414*** to each 100 gallons of developing solution). Add 2% for aqueous dry film photoresists; 3% for liquid photoimageable solder masks.

BENEFITS:

- Increases yields-consistent high quality boards
- Faster developing time-increased productivity
- Anti-scale agents-keep machine clean
- Liquid concentrate-no mixing

CAUTIONS: ***DEVADD 414*** is an eye irritant. Flush affected area with water and seek medical attention. Refer to Material Safety Data Sheet for further information.

DISPOSAL: Spent solutions are treated in the same manner as the dry film manufacturer recommends for standard carbonate solutions.

ANALYSIS:

Equipment required: 10 ml pipette
50 ml burette
250 Erlenmeyer flask

Reagents required: 0.1N Hydrochloric acid
Bromocresol green indicator

Procedure:

1. Pipette a 10 ml sample into a 250 ml Erlenmeyer flask.
2. Add 50 ml distilled water and mix.
3. Add 5 drops of Bromocresol green indicator solution and mix.
4. Titrate with 0.1N HCl until the color changes from blue to a pale yellow. Record mls used.

OR

Calculation: mls of 0.1N HCl X 5.6 = Percent *DEVADD 414*

This procedure is an analysis for the product as supplied, to be used for incoming quality control inspection. The analysis for working solutions is the standard analysis for carbonate concentrate.

This product should be used only for its intended purpose. The information stated above is based on our laboratory tests and experience, and is accurate to the best of our knowledge. Since actual use is beyond our control, the recommendations or suggestions are made without warranty, expressed or implied.