

Ethanolamines/Glycol Ethers

Tier 3 Procedure

Section Number: 643
Issue Number: 1.5
Original Date: 04-01-92 **Author:** Keith B./Bryan A.G.
Date: 03-13-98
Title: Running A Ph On The Potentiograph E526
References: Glossary Of Equipment Identification(Text # 114)

=====

643. Running A Ph On The Potentiograph E526.

1.0 Objective:

1.1 To provide step by step instructions necessary to properly conduct running a ph analysis on the potentiograph.

2.0 Responsibility:

2.2 It is the responsibility of the operator performing the task to ensure that this procedure is executed in a safe and efficient manner.

3.0 Special notations:

3.1 Of the following settings below, only 643.4.9 through 643.4.11 a need to be changed from running a percent koh titration.

3.2 The follow settings give a range of 5 ph units on the chart paper. 40= ph 8, 50% = ph 10.5, and 100% = ph 13

4.0 Procedure:

4.1 1. Power on; l1 on.

4.2 2. L2 off; stop

4.3 3. L3 on; stand by mode

4.4 4. Pen up

4.5 5. Mm/100% vol at 200

4.6 6. Stop % u off

4.7 7. Auto control at 5

4.8 8. Min/100% vol at 15

Date Printed: April 18, 1998

Paper Copies Of This Document Are Uncontrolled & Not Subject To Update.
The Controlled Document Resides In File: Lab/Runaph.doc

Page 1 Of 3

DO A 059903
CONFIDENTIAL

- 4.9 9. Mv x 100 at ph = 8 (scale on right side)
- 4.10 10. Mv/ph setting.
- 4.11 11. Set at 5
- 4.12 12. Mv/ph normally 95-100
- 4.13 13. U (cal. Factor) reset at calibration.
- 4.14 14. Degrees c normal room temperature.
- 4.15 15. Damper switch in back of console must be on.
- 4.16 16. No acid will be used during this measurement.

5.0 Titration:

- 5.1 By squeezing the release trigger under the electrode assembly arm raise the electrode(s) out of the electrolyte or buffer solution.
- 5.2 Place an empty beaker under the electrode(s).
- 5.3 Rinse electrode(s) with deionized water thoroughly:
- 5.4 Discard the rinse material.
- 5.5 Put 10.0 ml of sample into a clean titration beaker containing a stirring bar.
- 5.6 Add 40 ml deionized water.
- 5.7 Place beaker with sample under electrode(s) and lower electrode assembly into beaker.
- 5.8 Turn on the magnetic stirrer (speed 3); make sure stir bar does not hit electrode(s).
- 5.9 Depress standby/measure switch (#3) so that I3 is off.
- 5.10 Allow pen to stabilize.
- 5.11 Lower the pen (depress switch #4) and rotate the manual paper drive knob to mark the pens position on the chart
- 5.12 Raise the pen (depress switch #4).
- 5.13 Depress the standby/measure switch (#3) so that I3 is on the pen should return to the center position of the chart paper.

5.14 Raise the electrode assembly above beaker.

5.15 Rinse the electrodes with deionized water.

5.16 Place the electrode(s) in the ph 7 buffer solution.

5.17 To determine the results of the measurement refer to the calculations section (page b-6) of the potentiograph e 536 manual.

6.0 Revisions:

Revision No. 1	02-24-93	Changed wording on 643.5.5: instead of pipe used put and added of after ml.
Revision No. 2	12-21-94	Yearly Review
Revision No. 3	02-24-95	Changes made as a result of the January procedure review (see moc)
Revision No. 4	12-29-95	Yearly Review
Revision No. 5	03-13-98	Deleted 2.1 Modified new 2.1