

Ethanolamines/Glycol Ethers

Tier 3 Procedure

Section Number: 657
Issue Number: 1.1
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Title: Preparation of Titration Cell and Water Machine Start-Up
References: Material Safety Data Sheets; Aquatest CMA Operator's Manual

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657 PREPARATION OF TITRATION CELL AND WATER MACHINE START-UP

1.0 Objective:

1.1 To insure that the water machine is prepared so that good results can be obtained.

2.0 Responsibility:

2.1 It is the responsibility of the Senior Lab Specialist to ensure that this procedure is followed correctly.

3.0 Safety Notation:

3.1 The vessel solution contains methanol, chloroform, sulfur dioxide, benzoic acid, and iodine. The generator solution contains 2-methoxyethanol (EM), iodine, and sulfur dioxide. Care should be taken to avoid contact with the solutions. All waste should go into the appropriate waste container under the lab hood.

3.2 Monogoggles and rubber gloves are required during preparation of the titration cell.

4.0 Special Notations:

4.1 Care should be taken so that water does not enter the titration cell.

5.0 Procedure:

5.1 Turn off the water machine.

5.2 Preparation of the titration cell.

5.2.1 Drain the titration cell using the stopcock.

5.2.2 Remove the glass stopper from the generator solution cell and empty the cell using a pipet.

5.2.3 If any solid particles remain in either cell, rinse the cell with methanol to remove the solids.

5.2.4 Remove the drying tube from the titration cell. Place approximately 70 ml of vessel solution into the titration cell. Replace the drying tube.

5.2.5 Place about 3 ml of generator solution into the generator solution cell.

5.3 Turn on the water machine.

5.4 When "STANDBY" is displayed, press [TITR CURRENT]. Enter three for the stir speed.

5.5 The machine will take 5 to 10 minutes to titrate to setpoint. When the machine beeps three times, it is ready for use.

6.0 Cleaning Procedure

6.1 Turn off machine.

6.2 Empty solution and titration cells.

6.3 Fill Titration and solution cell with MeOH.

6.4 Turn on machine.

6.5 Push Titr Current.

6.6 Set speed at 5.

6.7 Let spin go for 10 minutes.

6.8 Turn off machine.

6.9 Empty contents of both cells.

6.10 Prepare machine with new solution.

7.0 Revisions:

7.1	Revision No. 1	02-02-96	Revised 6.0 section and 5.4.
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