

INTENDED USE

EC Strong Regenerating Solution is intended to be used to perform a strong cleaning of measuring electrodes, during or after the EC Milk Urea analyses performed with the EC CL-10 Plus, EC CL-10 Micro (Part No. MCP549) and EC Microlab EFA (Part No. MEA549) instruments. This kit is not to be used in any human clinical or veterinary diagnostic application.

Part No: 034B

KIT COMPOSENTS

R1 : Strong Regenerating solution – 2 × 20 ml

MATERIALS

Other necessary materials not provided include:

- Raw milk
- 2 mL vials
- 250 mL bottle
- Disposable Pasteur pipette
- Micropipette and tips
- Distilled water

TEST PROCEDURE

This procedure applies to avoid overestimation of results during or after use of EC Milk Urea method.

It is recommended to run it every three months as routine maintenance and after the contamination check procedure if required.

PREPARATION OF “LOW UREA REFERENCE SAMPLE”

Important: Prepare a milk sample following these instructions and use it as ‘low urea reference sample’ or utilize the Vial 0 reagent from the EC Milk Urea Standard kit.

1. Dispense 1 mL of raw milk into a 2 mL vial using a disposable Pasteur pipette.
2. Using the micropipette add 20 µl of R2 Urease Starter from Urea kit.
3. Mix gently.
4. Heat the vial in the water-bath at 40°C for 10 minutes.

CLEANING PROCEDURE

The procedure is described on page 2-3 of this manual; [Figure 1](#) defines the different steps of the procedure performed at the end of working session as routine maintenance;

[Figure 2](#) defines the different steps of the procedure performed during the working session.

For trouble-shooting and further maintenance use, please consult the respective instrument operating manual.

Figure 1 – at the end of the working session

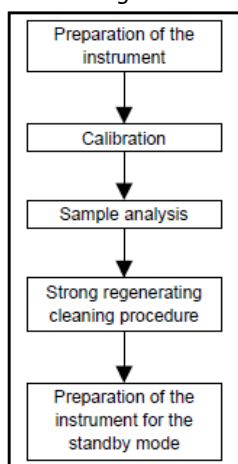
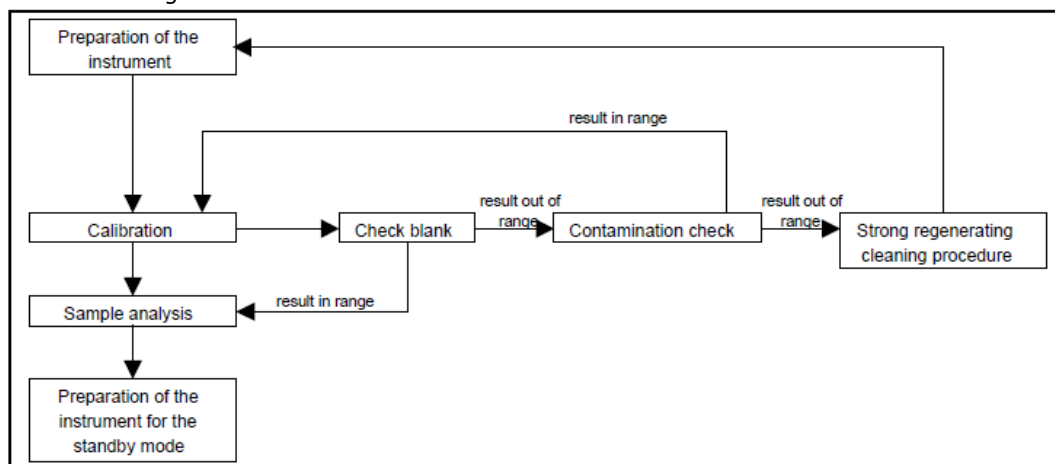


Figure 2 – During the working session



A. Cleaning Procedure Performed with EC CL-10 Plus and CL-10 Micro

a) Recommended procedure during the working session for Contamination check



1. After the Calibration procedure during the EC Milk Urea method execution, run *Sample* once (without injecting any sample) using the *GO* icon or the *F5* function key.
2. Press *Start measure*, then type “*check blank*” in sample id and press *Accept*. The result must be equal to the zero ± 1.5 mg/dL.
If the result is correct, proceed to the sample analysis according to the EC Milk Urea package insert.
If not, proceed to the following step 3.
3. Using a Micropipette, dispense 25 μ L of *Low urea reference sample* (or vial from EC Milk Urea Standard kit) into the mixing chamber.



4. Run *Sample* once using the *GO* icon or the *F5* function key. Press *Start measure*, then type “*check contamination*” in sample id then press *Accept*. The result must be within the range: [Min: -1; Max: +3].
If the result is in range, proceed to the *Calibration* procedure according to the EC Milk Urea package insert, then proceed to the *Sample analysis*.
If the obtained result is higher than 3 mg/dL, proceed to the following *Strong Regenerating* procedure.

Strong regenerating procedure for electrode regeneration after contamination check



5. Replace the R1 Buffer from EC Milk Urea kit with the Strong Regenerating Solution.
6. Insert the starter needle going into enzyme pump 6 into a vial containing at least 2 mL of distilled water.
7. Run *Prime enzyme* once using the prime enzyme icon or the *F2* function key.
8. Run *Clean* two times using the clean icon or the *F3* function key. During this operation lift, at regular intervals, the buffer top to allow intervals of five cm segments of air to five cm intervals of Strong Regenerating Solution to circulate in the system.
9. Wait for five minutes.
10. Run *Clean* again using the clean icon or the *F3* function key. During this operation, leave the buffer top in strong regenerating solution.
11. Replace the Strong Regenerating Solution with a bottle containing reconstituted wash solution from EC Milk Polif kit.



12. Run five times *Clean* using the clean icon or the *F3* function key. During the fifth *Clean* cycle leave the buffer top lifted to allow air flow in the system.
13. Using a Pasteur pipette inject about 1 mL raw milk in the mixing chamber.
Wait for one minute and run once more *Clean*.
14. Wait for two minutes.
15. Run *Sample* once using the *GO* icon or the *F5* function key.
Press *Start measure*, then type “*stabilization*” in sample id and press *Accept*.
16. Repeat steps 9 and 10 until the result is within the range ± 0.5 mg/dL.



17. Cleaning procedure is completed.
Replace the reconstituted wash solution with R1 Buffer from EC Milk Urea kit and replace the vial containing distilled water with the R2 Urease Starter from EC Milk Urea kit.
Start the urea test procedure from the beginning according to the EC Milk Urea package insert

b) Recommended procedure every three months as a routine maintenance

This procedure has to be performed every 3 months at the end of the working session, as routine maintenance.

1. Replace the R1 Buffer from EC Milk Urea kit with the Strong Regenerating Solution.
2. Insert the starter needle going into enzyme pump 6 into a vial containing at least 2 mL of distilled water.



3. Run *Prime enzyme* once using the prime enzyme icon or the F2 function key.
4. Run *Clean* two times using the clean icon or the F3 function key. During this operation lift, at regular intervals, the buffer top to allow intervals of five cm segments of air to five cm intervals of Strong Regenerating Solution to circulate in the system.
5. Wait for five minutes.
6. Run *Clean* again using the clean icon or the F3 function key. During this operation, leave the buffer top in strong regenerating solution.



7. Replace Strong Regenerating Solution with a bottle containing at least 100 mL distilled water.
8. Run *Clean* three times using the clean icon or the F3 function key.
9. Replace the distilled water bottle with a bottle containing reconstituted wash solution from EC Milk Polif kit.



10. Run five times Clean using the clean icon or the F3 function key. During the fifth Clean cycle leave the buffer top lifted to allow air flow in the system.
11. Using the disposable Pasteur pipette inject about 1 mL raw milk in the mixing chamber. Leave one minute and run once more *Clean*.
12. Check that enough diluted wash solution is left for the estimated standby period (the wash cycle automatically runs every 90 minutes and consumes about 4.0 mL of reconstituted wash buffer for each cycle).
13. In the *Service* menu, choose *Enter REST* mode.
14. Leave the instrument with the power on. Turn the monitor off.

Note: If the instrument will not be used for a longer period of time make sure that a sufficient amount of wash solution is available or consult the operating manual for instructions on shutting down the instrument.

B. Cleaning Procedure Performed with EC Microlab EFA (*software version 2.3 or higher*)

It is recommended to run this procedure during the working session in case of strong pollution of electrodes or as routine maintenance.

1. Select the **Maintenance** button from the main **EFAInstrument** window.
2. A **Method Message** window will appear. Press the **Continue** button.
3. Select the **Strong Regeneration** (option 2) and press OK. A message will appear to confirm the choice: press **OK**.
4. A **Method Message** window will appear. Follow the instructions:
 - (a) Connect a vial containing wash solution (from EC Milk Polif) to the peristaltic pump no. 3 of the measuring unit and place a vial containing *Electrode protection solution* in position 1 of sample rack. Press any key when done.
 - (b) Manually pipette approximately 1.5 mL of Strong Regenerating Solution in the mixing cell. Press OK when done.
 - (c) A timer will appear indicating the remaining time necessary for the decontamination. Wait for the completion of the process.
5. At the end of the process, the **Maintenance** window appears again. **Abort** the program.
6. A **Method Message** window will appear:
 - (d) If you intend to leave the instrument in standby mode, select **Yes**. Turn off the PC and the pipettor arm.
 - (e) If you intend to proceed to the working session, select **No**.
From the Service menu select *Prestability* (option 1) and follow the instructions (for the details please consult the instrument operating manual).

STORAGE CONDITIONS

The concentrated wash solution can be stored at room temperature (18-30° C) until the expiration date stated on the vial.

SAFETY

Good laboratory practice should be employed when using this kit. Safety clothing should be worn and skin contact with reagents avoided. Do not ingest.

Material safety data sheets are available on request.

EXP *use before*
Date d'expiration

REF *catalogue number*
N° dans le catalogue
Store at room temperature
Conserver à température
ambiante



Attention

LOT *Lot*
N° de lot



Notice utilisation
Operation note



Biosentec
65 Allée Campferran
31320 Auzeville-Tolosane