

SF-E100 cell cleaning procedure

The following procedure outlines the approved method for cleaning the SF-E100 syringe and observation cell assembly, and should be done as needed to maintain stable data for your SF-E100. In particular, if you observe erratic, irreproducible data it could be due to a plugged mixer, and can be remedied by following this cleaning procedure.

Materials needed:

- Deionized (DI) Water
- 2N NaOH solution
- 2N HCL solution
- Leur Lock syringes to load solutions
- Breaker for waste solutions

Warnings:

- Observe all regulations regarding the storage and disposal of hazardous materials.
- Always use appropriate safety precautions for handling of Acids and Bases to prevent injury.

Procedure:

1. Flush drive syringes with DI Water.
 - a. With the syringe control valves in the LOAD position fill both drive syringes with DI water.
 - b. Turn the dump syringe valve to the FLUSH position.
 - c. Turn syringe valves to FIRE position.
 - d. Manually drive the DI water through the cell and into the waste syringe.
 - e. Close the dump syringe valve and empty the waste syringe.
2. Flush system with 2N NaOH solution.
 - a. With the syringe control valves in the LOAD position fill both drive syringes with the 2N NaOH solution.
 - b. Turn the dump syringe valve to the FLUSH position.
 - c. Turn syringe valves to FIRE position.
 - d. Manually drive the NaOH solution through the cell and into the waste syringe
 - e. Allow solution to soak for 5-10 minutes.
 - f. Close the dump syringe valve and empty the waste syringe.
3. Flush with DI water (see step 1) three times.
4. Flush system with 2N HCL solution.
 - a. With the syringe control valves in the LOAD position fill both drive syringes with the 2N HCL solution.
 - b. Turn the dump syringe valve to the FLUSH position.
 - c. Turn syringe valves to FIRE position.
 - d. Manually drive the HCL solution through the cell and into the waste syringe.
 - e. Allow solution to soak for 5-10 minutes.
 - f. Close the dump syringe valve and empty the waste syringe.
5. Flush with DI water (see step 1) three times.