

SF-2004 Cell cleaning procedure

The following procedure outlines the approved method for cleaning the SF-2004 syringe and observation cell assembly, and should be done as needed to maintain stable data for your SF-2004. 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
- Beaker 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 valve in the LOAD position fill syringes with DI water.
 - b. Open the STOP valve using the KinTek SF program.
 - c. Turn syringe valve to FIRE position.
 - d. Manually drive the DI water through the cell and into the waste syringe.
 - e. Close the STOP valve and empty the waste syringe.
2. Flush system with 2N NaOH solution by forcing it backwards from the waste syringe.
 - a. Fill a syringe with the 2N NaOH solution and attach it to the waste collection line.
 - b. Open the STOP valve in the SF program.
 - c. With the syringe valve in the FIRE position drive solution up through the cell from the waste syringe into the sample syringes.
 - d. Close the STOP valve and allow solution to soak for 5-10 minutes.
 - e. Open the STOP valve and manually drive the solution back to the waste syringe.
 - f. Empty the waste syringe and reconnect.
3. Flush with DI water (see step 1).
4. Flush system with 2N HCL solution by forcing it backwards from the waste syringe.
 - a. Fill a syringe with 2N HCL solution at attach it to the waste collection line.
 - b. Open the STOP valve in the SF program.
 - c. With the syringe valve in the FIRE position drive solution up through the cell from the waste syringe into the sample syringes.
 - d. Close the STOP valve and allow solution to soak for 5-10 minutes.
 - e. Open the STOP valve and manually drive the solution back to the waste syringe.
 - f. Empty the waste syringe and reconnect.
5. Flush with DI water (see step 1).