

## Clean the VROC<sup>®</sup> Chip Thoroughly after Testing

**⚠ Always use the provided software package (SP program) with the VROC<sup>®</sup> chip for any testing and cleaning. Do not attempt to use the pump manually with the VROC chip.**

Users should be aware that drying of a sample solution inside the chip after a prolonged period of inactivity carries a high risk of permanently clogging the chip, preventing normal fluidic flow inside the chip.

To avoid clogging of the chip, it is very important that the user clean the chip thoroughly with an appropriate solvent to remove sample solution after testing.

The recommended procedure consists of the following steps:

- (1) Disconnect the inlet fitting from the syringe after testing.
- (2) Wipe and clean the inlet fitting of the sample solution.
- (3) Connect a solvent-filled syringe to the chip.
- (4) Using the SP program, set a low flow rate (**the flow rate should not exceed the maximum used during sample testing**) and infuse about 250ul of solvent to remove majority of the sample solution from the chip.

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- (5) Using the SP program, increase the flow rate (the flow rate will be based on the viscosity of solvent) and flush the chip 2 - 3 times.
- (6) Stop infusing and let the solvent sit for 1-2 minutes.
- (7) Using the SP program, set to low flow rate and flush the chip 2 - 3 times.
- (8) Repeat steps 5 through 7 as many times as necessary depending on the sample solution. Please see Appendix II for more on the suggested cleaning procedure.
- (9) Finally, test the viscosity of the solvent with the chip to verify that the chip is clean.
- (10) After cleaning the chip, disconnect the inlet fitting from the syringe.
- (11) Wipe and clean the inlet fitting again and place the cap back onto the fitting for storage.

If clogging persists, do not attempt to force a flow as it may cause permanent damage to the chip. If there is any sign of clogging, please contact the manufacturer for a possible solution.