

Ease-Eject™ Sampler

20 µL

Part No. 3M0825

For use *only* with these Advanced Instruments micro-osmometers:

- OsmoTECH® and OsmoTECH XT
- Osmo1®

ADVANCED
INSTRUMENTS

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3M0825

Ease-Eject Sample Handling Highlights

This sampler is designed for use with following osmometers and test kits:

Micro-osmometer	Test kit
OsmoTECH	TECH250
OsmoTECH XT	XT100
Osmo1	133800

Using any other means of sample introduction in this instrument is not recommended. Do not use this sampler for any other laboratory procedure.

Calibration

Your sampler is calibrated using a gauge rod stored in the hollow upper-end of the plunger shaft. The hex key is the gauge.

Checking the calibration

1. Unscrew the gauge key from the plunger shaft and insert it into the tip orifice.
2. The gauge should just reach from the tip orifice to the end of the plunger tip. (over)

Adjusting the calibration

1. Rotate the plunger shaft until the calibration set screw is visible through the calibration access hole.
2. Use the hex key to loosen the set screw one-half turn, and slide the gauge into the pipet tip.
3. Press the plunger to force the gauge to protrude from the tip orifice.
4. Press the gauge down until it is flush with the orifice and retighten the calibration set screw.

Operation

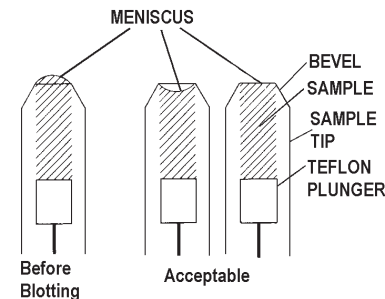
Installing the sampler tip

Slide a sampler tip over the plunger wire and mount the tip firmly on the sampler body. Be sure the sampler tip is straight and seated firmly.

Sampling

1. Depress the plunger knob and insert the sample tip into the sample at least ¼" or 6 mm below the fluid surface.
2. Gently release the plunger to draw 20 µL of sample into the sample tip and remove the sampler from the sample.
3. Visually inspect the sample in the sample tip. If there are any large voids or bubbles, expel the sample and draw another sample.
4. Wipe all excess sample from the outside of the sample tip with a clean, no-lint, non-ionic paper tissue to remove any clinging droplets. The sample should not extend beyond the end of the sample tip.

5. Blot the sample tip with tissue as necessary to remove excess fluid, but be careful not to wick out the sample. If you are in doubt, leave a slightly concave meniscus.



6. Holding the sampler by the body (not the plunger knob), insert the sampler into the instrument's operating cradle.
7. Gently push the end of the cradle to insert the sampler tip fully into the sample port.

Testing automatically begins when cradle reaches the end of its travel.

- Do not attempt to eject the sample into the sample port.
- Do not remove the sampler until the test has been completed.

The sample osmolality is measured inside the sample tip.

Removing the sample tip

To dispose of the used sample tip:

1. Press down hard enough on the plunger knob to dislodge the tip, or apply a slight bending force using the thumb and forefinger where the tip is pressed onto the sampler.
2. Remove the tip from the plunger wire and discard.
3. Blot the plunger wire with a lint-free tissue to avoid contaminating the next sample.
4. Be careful not to dislodge the teflon plunger tip.

Between runs, rinse the plunger tip with water or alcohol and wipe dry.

Check the sample size with the calibration key periodically.

Replace the sampler plunger wire with each new test kit.

A replacement plunger wire is included with each kit.

See your instrument's User's Guide for detailed operating instructions and illustrations.

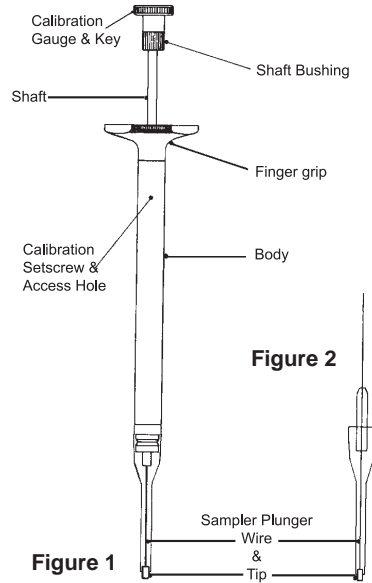
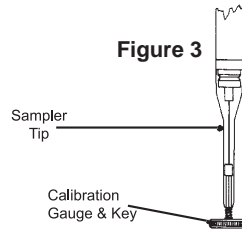


Figure 1

Figure 3



20 µL sampler

Replacing the plunger wire

Replace the sampler plunger wire with each new test kit.

1. Unscrew the calibration gauge and key (see figure 1).
 - a. Rotate the shaft until the calibration setscrew appears beneath the access hole in the side of the sampler body.
 - b. Use the calibration key to loosen the setscrew.
2. Carefully remove the old sampler plunger wire. If it contains a plastic sleeve, save and install it on the new plunger.
3. Slip a new sampler plunger wire into a new sample tip so the teflon plunger tip protrudes about $\frac{1}{16}$ " or 1.6 mm (see figure 2).

NOTE: If the new sampler plunger wire does not fit into the new sample tip without using excessive force, see step 9.

4. Insert the plunger wire into the sampler body and secure the sample tip in place.
5. Using the calibration gauge and key, push the plunger into the sampler as far as it can go (see figure 3).
6. Tighten the calibration setscrew with the calibration gauge.
7. Screw the calibration gauge and key back into the top of the sampler.

8. The sampler is now calibrated and ready to use.

9. If the sample tip does not assemble over the new sampler plunger wire without using excessive force, place the wire end into the back end (large diameter) of the sample tip (see figure 4).

- a. Install the plunger wire and tighten.
- b. Move the sample tip in a back-and-forth motion over the plunger wire until the fit is acceptable.
- c. Remove both parts and assemble per step 3.



Figure 4



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Printed in USA

3MP825 Rev15

3MP825AW Rev1