

Electrophoresis: Sample Delivery

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Sample Delivery Instruments



VARIABLE AUTOMATIC MICROPIPETS:

An automatic micropipet is used to deliver accurate, reproducible volumes of sample.

- For the electrophoresis of dyes, or gels to be stained with InstaStain® Methylene Blue, load the sample well with 35-38 microliters of sample.
- For gels to be stained with InstaStain® Ethidium Bromide, load the sample well with 18-20 microliters of sample.

Check the specific experiment instructions or with your instructor regarding the amount of sample you should be delivering.

FIXED VOLUME MICROPIPETS:

Accurate sample delivery can also be achieved using fixed volume micropipets. These types of micropipets are pre-set to a specific volume. Although the volume can not be changed, these types of micropipets operate similarly to the variable automatic



micropipets. Most fixed volume pipets do not have ejector buttons, so the tips must be removed manually.

TRANSFER PIPETS:

With EDVOTEK electrophoresis systems, an alternative sample delivery method can be used if you do not have automatic micropipets. Disposable plastic transfer pipets can be used, but they are not precise. Because their volumes can not be accurately controlled, their use can result in significant sample waste.



To help control the delivery of small sample volumes with transfer pipets, gently squeeze the pipet stem, instead of the bulb. When using transfer pipets for sample delivery, load each sample well until it is full.

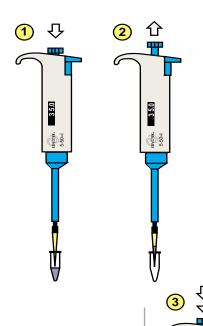
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Sample Delivery (Gel Loading)



1 Set the micropipet to the appropriate volume and place a clean tip on the micropipetor.

Press the top button down to the first stop. then immerse the tip into the sample.

2 Once the tip is immersed in the sample, release the button slowly to draw sample into the tip.

Position the pipet tip over the well. Be careful not to puncture or damage the well with the pipet tip.

3B Deliver the sample by pressing the button to the first stop - then empty the entire contents of the tip by pressing to the second stop.

After delivering the sample, do not release the top button until the tip is out of the buffer.

Press the ejector button to discard the tip.

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