

Sample Dilution

Sample dilution, prior to testing, can be employed to extend the range of many CHEMetrics test kits. Sample dilution can also be employed to prevent interferences from sample turbidity, color or other sample constituents. Dilution is not appropriate when testing for all analytes. Some analytes for which dilution is not appropriate are: alkalinity, carbon dioxide, conductivity, dissolved oxygen, pH, and ozone.

Sample Dilution Procedure

- Using the table below, select the necessary components to accomplish the desired dilution.
- For the desired dilution, dispense the specified volume of sample into a sample container and dilute to 25 mL with distilled water. Stir to mix the contents of the container.
- Perform the Test Procedure included in the parameter specific test kit as written, using this diluted sample as the sample to be tested. Be sure to use the exact volume of sample that is called for in the kit instructions.
- Multiply the test result obtained from testing the diluted sample by the appropriate multiplication factor from the table below. The resulting value is the actual concentration value for the undiluted sample.

Sample Volume	Sample Measuring Device		Dilution/ Multiplication Factor
	Catalog No(s).	Description	
2.5 mL	A-0063	3 mL Syringe	10
1 mL	A-0063	3 mL Syringe	25
200 µL	A-0194 & A-0171	200 µL Minipet & Tips	125
100 µL	A-0170 & A-0171	100 µL Minipet & Tips	250
50 µL	A-0193 & A-0171	50 µL Minipet & Tips	500
25 µL	A-0191 & A-0171	25 µL Minipet & Tips	1000

How to Use the MiniPet®

- Place a pipette tip firmly onto the end of the selected minipet (figure 1).

NOTE: The pipette tips are not designed for re-use. Use a new tip for each sample dilution.

- Depress the plunger on the minipet. Immerse the tip in the water sample and release the plunger. When the plunger is released, a portion of the test sample will be drawn into the yellow tip (figure 2).

NOTE: Use of good pipetting technique is critical to accurate test results. The end of the tip must not be touching the side or bottom of the sample container.

- Holding the minipet over the selected sample container, depress the plunger to dispense the sample (figure 3).

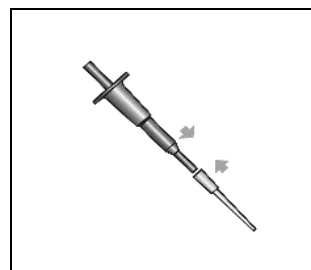


Figure 1

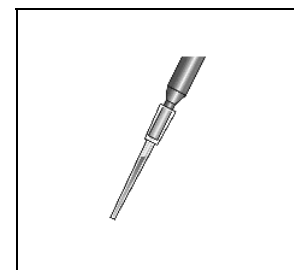


Figure 2

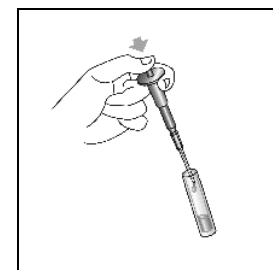


Figure 3

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