

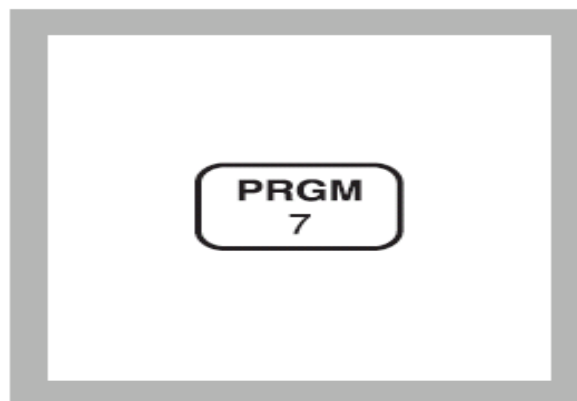


ZINC

(0 to 3.00 mg/L Zn) Method 8009

For water and wastewater

Zincon Method* USEPA approved for wastewater analysis**



1. Enter the stored program number for zinc (Zn).

Press: **PRGM**

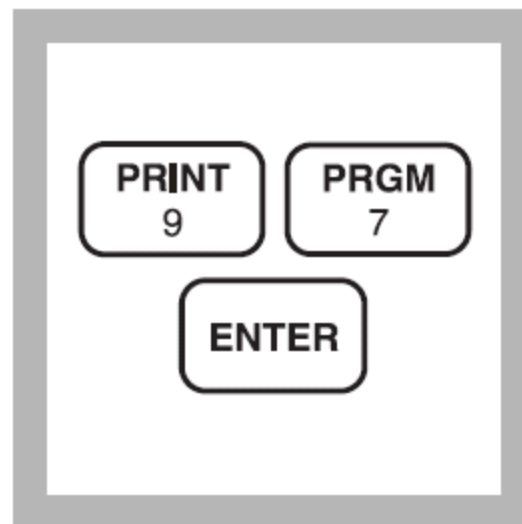
The display will show:

PRGM ?

Note: For most accurate results, perform a Reagent Blank Correction using deionized water (see Section 1).



ZINC



2. Press: **97 ENTER**

The display will show **mg/L, Zn** and the **ZERO** icon.

***Note:** Total zinc requires a prior digestion; use either the Digesdahl or mild digestion (Section 2).*

***Note:** Adjust the sample to pH 4-5; see Sampling and Storage following these steps.*



ZINC



3. Fill a 25-mL sample cell with 20 mL of sample.

***Note:** Rinse glassware with 1:1 hydrochloric acid and deionized water before use.*

***Note:** If samples cannot be analyzed immediately, see Sampling and Storage.*



ZINC



4. Add the contents of one ZincoVer 5 Reagent Powder Pillow. Cap. Invert several times to completely dissolve the powder. If the sample does not turn orange, see the note below.

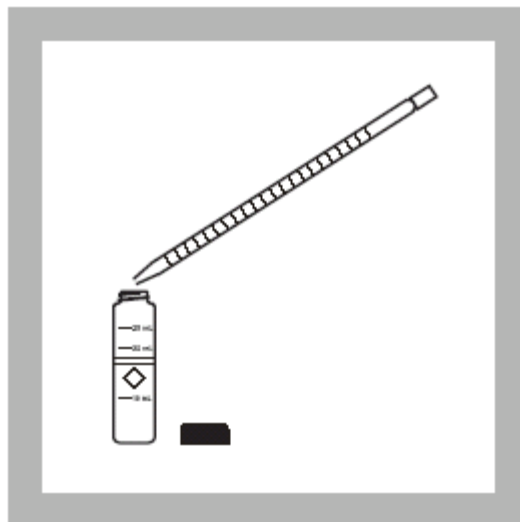
Caution: ZincoVer 5 contains cyanide and is very poisonous if taken internally or inhaled. Do not add to an acidic sample. Store away from water and acids.

***Note:** Powder must be completely dissolved or inconsistent results may occur.*

***Note:** The sample should be orange. If it is brown or blue, dilute the sample and repeat the test. Either the zinc concentration is too high or an interference is present.*



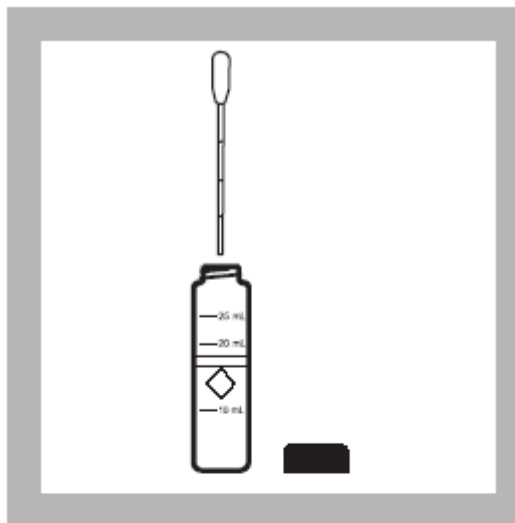
ZINC



5. Measure 10 mL of the orange solution into another sample cell (the blank).



ZINC

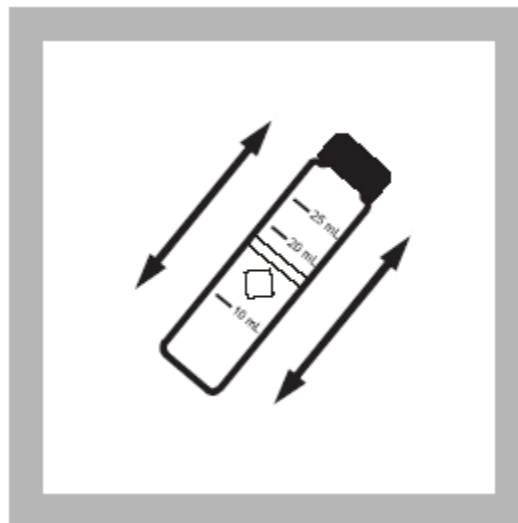


6. Add 0.5 mL of cyclohexanone to the remaining orange solution in the first sample cell (the prepared sample).

Note: Use a plastic squeezer. Rubber bulbs may contaminate the cyclohexanone.



ZINC

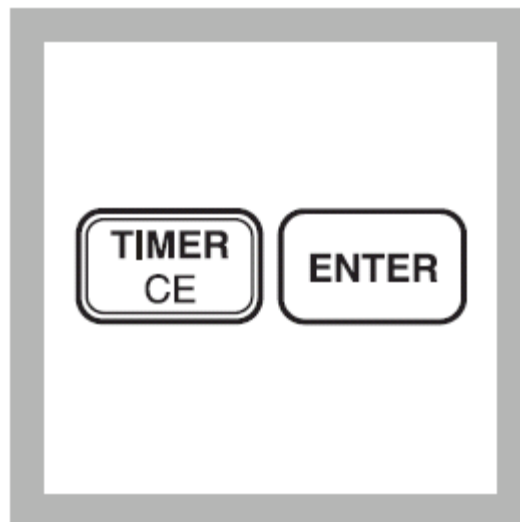


7. Tightly cap the cell. Shake vigorously for 30 seconds (the prepared sample).

Note: The sample will be red-orange, brown or blue, depending on the zinc concentration.



ZINC



8. Press:

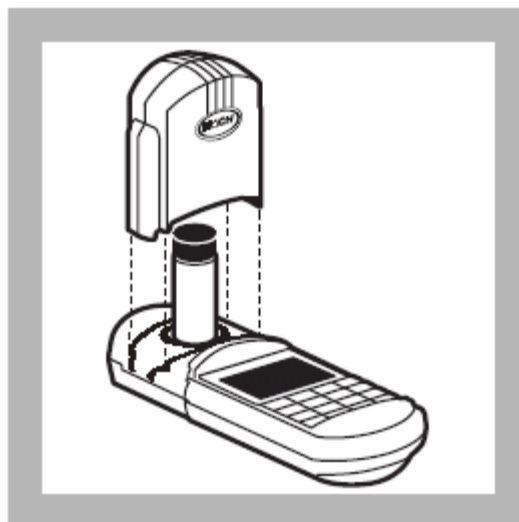
TIMER ENTER

A 3-minute reaction period will begin.

Note: Steps 9-11 must be completed within 10 minutes after the timer beeps.



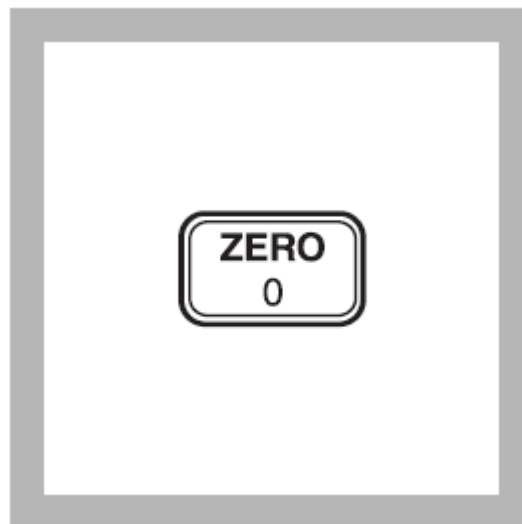
ZINC



9. Place the blank into the cell holder. Tightly cover the sample cell with the instrument cap.



ZINC



10. Press: **ZERO**

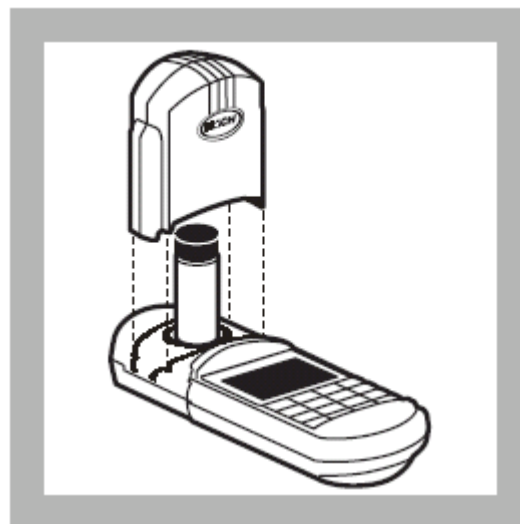
The cursor will move to the right, then the display will show:

0.00 mg/L Zn

Note: If Reagent Blank Correction is on, the display may flash "limit". See Section 1.



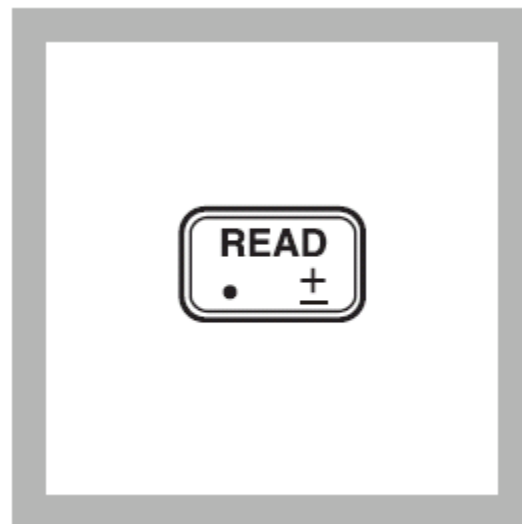
ZINC



11. Immediately place the prepared sample into the cell holder. Tightly cover the sample cell with the instrument cap.



ZINC



12. Press: **READ**

The cursor will move to the right, then the result in mg/L Zn will be displayed.

***Note:** Standard Adjust may be performed using a prepared 0.50 mg/L standard. See Section 1.*