

# Ammonia HR CHEMets® Kit

**K-1520B/R-1501/A-0171:**  
125 - 1250 ppm

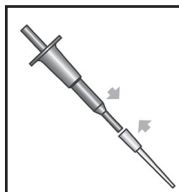


Figure 1

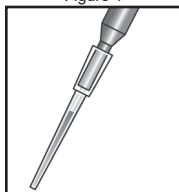


Figure 2

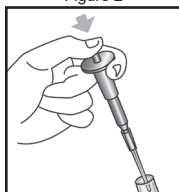


Figure 3

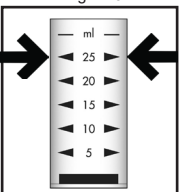


Figure 4

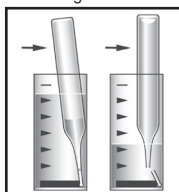


Figure 5

## Sample Temperature

Sample temperatures that deviate significantly from 20°C (68°F) may introduce test result bias.

## Test Procedure

1. Place a pipette tip firmly onto the end of the MiniPet®<sup>4</sup> (fig. 1).

**NOTE:** Use a fresh pipette tip for each test.

2. Depress the plunger on the minipet.

3. Immerse the tip in the sample to be tested and release the plunger. A portion of the sample will be drawn into the tip (fig. 2).

**NOTE:** Do not touch the side or bottom of the sample container with the tip during sampling.

4. Hold the minipet over the sample cup, and depress the plunger to dispense sample (fig. 3).

5. Dilute the contents of the sample cup to the **25 ml mark with distilled water** (fig. 4).

6. Place the CHEMet ampoule, tip first, into the sample cup. Snap the tip. The ampoule will fill leaving a bubble for mixing (fig. 5).

7. To mix the ampoule, invert it several times, allowing the bubble to travel from end to end.

8. Dry the ampoule. Obtain a test result **1 minute** after snapping the tip.
9. Obtain a test result by placing the ampoule between the color standards until the best color match is found (fig. 6).

**NOTE:** Use the 125 - 1250 ppm concentration scale on the comparator label.

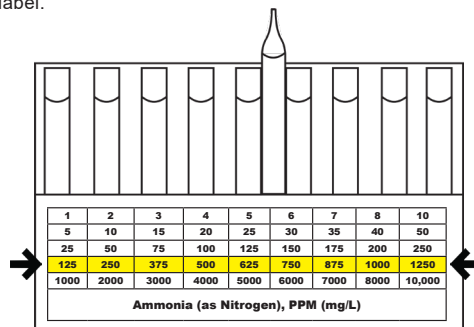


Figure 6

## Test Method

The Ammonia CHEMets®<sup>1</sup> test kit employs direct nesslerization.<sup>2,3</sup> In a strongly alkaline solution, ammonia reacts with Nessler Reagent ( $K_2HgI_4$ ) to produce a yellow-colored complex in direct proportion to the ammonia concentration.

This method is applicable to drinking water, clean surface water, good quality nitrified wastewater effluent and seawater. Other types of samples may require a preliminary distillation step.

1. CHEMets is a registered trademark of AquaPhoenix Scientific, LLC U.S. Patent No. 3,634,038

2. APHA Standard Methods, 18<sup>th</sup> ed., Method 4500-NH<sub>3</sub> C - 1988

3. ASTM D 1426 - 08, Ammonia Nitrogen in Water, Test Method A

4. Minipet is a registered trademark of Tricontinent Scientific, Inc.

## Safety Information

Read SDS before performing this test procedure. Wear safety glasses and protective gloves.