

# Ammonia HR CHEMets® Kit

**K-1520D/R-1501: 5 - 50 ppm**

## Sample Temperature

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

## Test Procedure

1. Using the syringe provided, obtain **5 mL** of the sample to be tested, and then dispense it into the empty sample cup.
2. Dilute the contents of the sample cup to the **25 mL mark with distilled water** (fig. 1).
3. Add **2 drops** of S-1500 stabilizer solution (fig. 2). Stir to mix the contents of the cup.
4. Place the CHEMet ampoule, tip first, into the sample cup. Snap the tip. The ampoule will fill leaving a bubble for mixing (fig. 3).
5. To mix the ampoule, invert it several times, allowing the bubble to travel from end to end.
6. Dry the ampoule. Obtain a test result **1 minute** after snapping the tip.
7. Obtain a test result by placing the ampoule between the color standards until the best color match is found (fig. 4).

**NOTE:** Use the 5 - 50 ppm concentration scale on the comparator label.

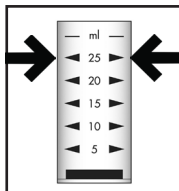


Figure 1

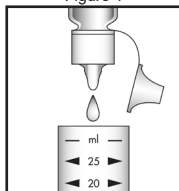


Figure 2

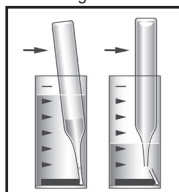


Figure 3

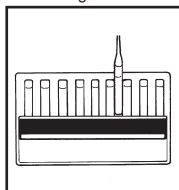


Figure 4

## 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, 23<sup>rd</sup> ed., Method 4500-Cl G - 2000

3. EPA Methods for Chemical Analysis of Water and Wastes, Method 330.5 (1983)

## Safety Information

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

