

Hello Again:

There have been some questions on setting up Ammonia Standards.

Here is One way that works well for most operators and lab technicians we work with.

Of course there is always more than one way to do most any job.

The brand and model of your equipment meters and probes are of your choice.

I hope you find this information useful and if you have any questions please contact us at, Indiana Water And Wastewater Association.

Until next time;

Tony Taylor

Wastewater Training Technician

Indiana Water and Wastewater Association

STANDARD FOR AMMONIA ANALYSIS

Apparatus:

1. Fisher Accumet Model 825MP pH Meter
2. Orion Model 95-12 Ammonia Electrode
3. Magnetic stirrer
4. Magnet stirring bar
5. 100 mL volumetric flask
6. 125 mL Erlenmeyer flask
7. 100 mL graduated cylinder
8. 10 mL pipet
9. Rinse bottle

Reagents

1. Ammonia Standard (Ammonium Chloride 1000ppm)
2. Ammonia pH Adjusting ISA (5M NaOH color indicator)
3. Ammonia free deionized water

1. Mixing the standards needed for calibration:

- a. **Use the 1000 ppm stock solution to make the working solutions needed for calibration. Store in BOD incubator when not in use.**
- b. **100 ppm working solution – take 10 mL of the 1000 ppm stock solution and place it in a 100 mL volumetric flask. Add 90 mL of ammonia free de-ionized water, and pour into BOD bottle. Store in BOD incubator when not in use.**

- c. 10 ppm working solution – take 10 mL of the 100 ppm working solution and place it in a 100 mL volumetric flask. Fill to the line with ammonia free de-ionized water.**
- d. 3 ppm working solution – take 3 mL of the 100 ppm working solution place it in a 100 ml volumetric flask. Fill to the line with ammonia free de-ionized water.**
- e. 1 ppm working solution – take 1 mL of the 100 ppm working solution and place it in a 100 mL volumetric flask. Fill to the line with ammonia free de-ionized water.**

The 10 ppm, 3 ppm, and 1 ppm standards will be used to calibrate the ammonia probe.

Before each use, make sure that all glassware has been rinse in ammonia free de-Ionized water.

End of Article.