



Instructions for Catalog # 4023 Nutrients QC Plus

Revision 090119

Description:

- These standards are packaged in two 15 mL screw-top vials containing approximately 14 mL of standard concentrate in each vial.
- These concentrates are preserved with approximately 1% (v/v) hydrochloric acid.
- The concentrates can be stored at room temperature.
- These products are intended to be used as a quality control check of the entire analytical process for the analytes/matrix included in the standard.
- The dilution instructions below represent the minimum suggested sample size for this product. Using a smaller sample size may invalidate the assigned value and/or uncertainty shown on the certificate of analysis.
- The certified values apply to the diluted sample after following the stated dilution instructions.

Helpful Hints:

- These standards have been prepared as concentrates and must be diluted prior to analysis.
- For labs using ion selective electrode methods, please note that these samples contain hydrochloric acid and chloride containing salts.
- As the concentrates contain hydrochloric acid, please note that the diluted samples will be acidic and may require pH adjustment depending on your analytical methods.
- These standards should be analyzed as soon as possible after the concentrate is diluted.
- Vial #2 should be analyzed for ammonia nitrogen as N, nitrate nitrogen as N, and orthophosphate as P. Vial #4 should be analyzed for total kjeldahl nitrogen and total phosphorus as P.

Instructions:

1. Add 100-200 mL of deionized water to two clean 1000 mL class A volumetric flasks.
2. Shake the Nutrients QC Plus vials prior to opening.
3. Using a clean, dry, class A pipet, volumetrically pipet 5.0 mL of the concentrate in Vial #2 into one of the 1000 mL volumetric flasks. Using a clean, dry, class A pipet, volumetrically pipet 5.0 mL of the concentrate in Vial #4 into the second 1000 mL volumetric flask.
4. Dilute both flasks to final volume with deionized water.
5. Cap the flasks and mix well.
6. Immediately analyze the diluted samples by your normal procedures.

Safety:

ERA products may be hazardous and are intended for use by professional laboratory personnel trained in the competent handling of such materials. Responsibility for the safe use of these products rests entirely with the buyer and/or user. Safety Data Sheets (SDS) for all ERA products are available through our website www.eraqc.com.