How to correctly prepare dilutions from concentrated solutions in hydroponics

Accurately preparing dilutions of concentrated nutrients is no trivial task. For example, if you want to prepare a 10 gallon solution at “2mL per gallon” of a hydroponic nutrient, ensuring that you’re adding 20mL and actually having a final volume of 10 gallons is not trivial, given the inherent errors in the measurement of both the transference volume and the final volume. *If you’re using non-standardized methods to measure volume (buckets, gallon jugs or “tank markings” to measure volumes), you could be off by +/-20% the volume you want*. However you can accurately prepare dilutions at whatever volume you want by first measuring the conductivity of an accurately prepared solution at a small scale. A solution prepared using calibrated volumetric material.

Starting a youtube channel to teach chemistry related hydroponic skills

The ScienceInHydroponics blog has been a great place to share my knowledge and experience in hydroponics during the last 11 years. However, the world has changed a lot since then and video has now become easier to produce and a better way to share a lot of practical content. For this reason I have decided to start the Chemisting youtube channel where I will be sharing chemistry related content. For starters this will

be mostly about practical skills in hydroponics – things like properly measuring large and small volumes, properly preparing stock solutions, taking care of electrodes, etc – but it will be expanded with videos on other topics that might eventually be outside of the realm of hydroponic culture.

The following is our first video – my wife has been instrumental in creating this channel and the video – where I share the proper technique to prepare a concentrated solution at a small scale. The video shows how to accurately measure volume and weight and how to carry out the transferring processes necessary. **Please don’t forget to like, subscribe, share and suggest any topics you would like to see in future videos!**

The Scienceinhydroponics blog will continue to be updated frequently though, as I continue to enjoy sharing blog articles with hydroponic growers around the world!