

# Microlab 600<sup>®</sup> Dry Weight Dilution Wizard



## The Microlab 600 Removes Calculations From the Equation

Standards preparation is a ubiquitous morning routine in analytical laboratory settings worldwide. Manual preparation of standards, utilizing Class A volumetric glassware dilutions, is one of the most common methods used in standard solution preparation. Manual preparation of the dilution of standards is difficult and time consuming. This method can be error prone, especially when transferring the standard from the scale to the volumetric flask. Quantitative transfer of standards is a process that requires skill and experience in order to be proficient.

The new Microlab 600 Dry Weight Dilution Wizard is designed to take the extraneous calculations and guesswork out of standard preparation. The wizard's library retains the compound/solvent information such as: density, molecular weight, and purity of the reagents. Once the library is created, the user can select the desired compound, solvent, concentration, and final volume. The Microlab 600 will calculate the required weight of sample and solvent volume to reach the desired concentration. Since the Microlab 600 completes all the work, sample preparation is much faster than traditional methods, and programs for standard creation can be saved. Multiple users can use the same easy program to produce consistent results with limited variation, making the Microlab 600 the best solution for standard preparation needs.



# Here's How the System Works

Define your library of Solvents and Samples. This library will include properties of the samples and solvents, such as density, molecular mass, purity, etc. Once the library is established, simply select the sample, solvent, desired concentration, and final volume. Based on the inputs, the instrument will automatically calculate the desired sample and solvent amounts.



The diagram above depicts how the Microlab 600 Dry Weight Dilution Wizard functions. After the desired concentration and final volume are selected, the instrument then specifies the amount of sample that is required.

1. The sample is weighed on a scale as close to the desired amount as possible.
2. The actual mass is put into the controller; the pump then recalculates the amount of solvent required to reach the desired concentration.
3. The solvent is dispensed.
4. The final weight is entered.
5. Desired concentration and volume is confirmed.

## Ordering Information

Part Number	Description
ML625-DIL	Advanced Dual Syringe Diluter
61500-02 <sup>1</sup>	Microlab 600 Upgrade Kit

<sup>1</sup> This should be purchased if you have a Basic Dual Syringe Diluters (ML615-DIL).

## Benefits of Dry Weight Dilution Wizard

- More precise sample preparation
- Accurate dispensing of solvent
- Faster standard creation time
- Improved traceability
- Less waste of valuable standard reagents
- Less training required to prepare standards

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Lit. No. L10073 — 04/2017

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