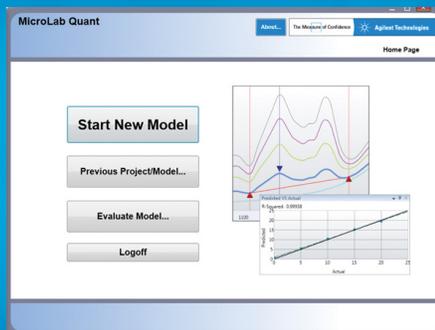


# MICROLAB QUANT SOFTWARE

The Measure of Confidence



**POWERFUL AND ACCESSIBLE QUANTITATIVE METHOD DEVELOPMENT FOR FTIR**

Quantitative analysis is a key capability of FTIR. With current instruments such as the Agilent Cary 630, 4500 Series and 4300 Handheld FTIR, quantitative calibrations can be conducted once and last for a long time. Since calibrations are not needed every day, intuitive software for quantitative method development is crucial.

Agilent MicroLab PC has been revolutionary software for both routine and mobile use. The unique method-driven approach guides users through all required steps to provide actionable answers with little to no training required. Agilent's new MicroLab Quant software expands the tested method-driven approach to include method development. Never before has it been so simple to create, evaluate and use a quantitative calibration curve for FTIR. Agilent brings the power of quantification to the ease of use of MicroLab.

MicroLab Quant is a powerful, intuitive tool for method development that guides the user through each step in building a quantitative method. Built-in checks make sure that simple user errors do not affect the calibration.

[Click here to view the application note: Agilent MicroLab Quant Calibration Software: Measure Oil in Water using Method IP 426 >>](#)

## MicroLab Quant Advantages:

- Ensures that all quantitative data was collected using the same parameters
- Provides for viewing the calibration results in real time to ease optimization
- Creates a method file including all collection parameters and calibration curves for direct use in MicroLab PC

For more information visit  
[agilent.com/chem/microlab](http://agilent.com/chem/microlab)



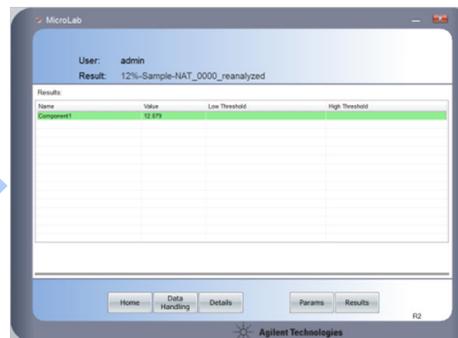
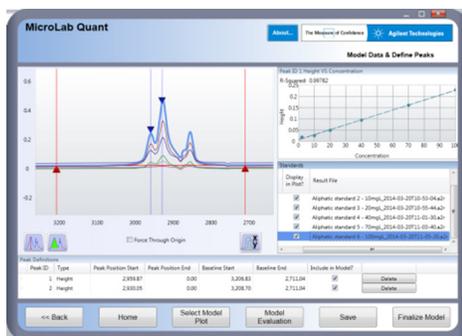
**Agilent Technologies**

## Microlab Quant and DialPath – a powerful combination

Infrared spectroscopy can provide sensitive and specific quantitative analysis of many samples. For most liquid samples, a transmission interface provides the most sensitive and reproducible analysis. Agilent's DialPath technology makes transmission spectroscopy simple to use. DialPath combines with Microlab Quant to give unrivaled performance and intuitive use on most liquid samples. The DialPath is available in path lengths from 30 to 1000  $\mu\text{L}$ , providing a range of sensitivities; each DialPath has three factory-set path lengths to provide flexibility for multiple applications. Collect high-quality calibration data using the DialPath, easily develop that into a quantitative calibration using Microlab Quant, and routinely analyze samples using the Microlab PC software – it is the complete package for your quantitative method needs.

## Product Highlights

- **Quantitative algorithms**
  - Simple Beer's law
  - Classical least squares (CLS)
  - Inverse least squares (ILS)
- **Peak definitions**
  - Peak height
  - Peak area
  - Peak ratio
- **Calibration diagnostics**
  - Actual versus predicted
  - Height/area versus concentration
  - Correlation (R2)
- **Real time updating of model performance**
- **Model evaluation**
  - Cross validation
  - Separate validation set
- **Save formats**
  - Microlab Quant Project
  - Microlab PC Method
  - Microlab PC Model

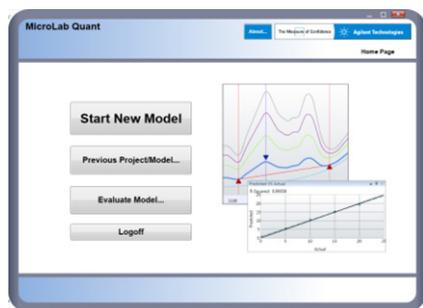


## Accessible, Powerful – Agilent’s Guided Approach

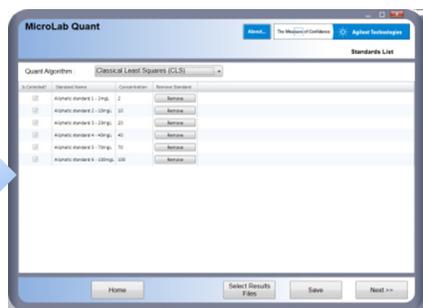
Agilent’s MicroLab Quant software provides powerful calibration tools in an intuitive, method-driven format. A method can be easily developed just by following the software prompts. For more experienced users, advanced functions such as Model Evaluation can be easily accessed, providing the fastest route to sophisticated, dependable methods. Also, Agilent’s real-time update speeds the model optimization process by showing the effect of changes as they are made. Both peaks and standards can be added or removed from the calibration in the peak definition screen to produce the best calibration in the shortest amount of time.

## Integrated Model Evaluation

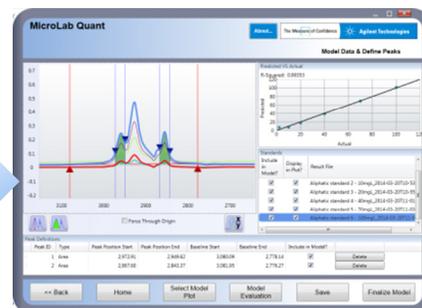
In addition to calibration development, MicroLab Quant provides a complete set of tools to evaluate a model both during the development process and later. The Model Evaluation feature includes both cross validation and separate validation tools. Cross validation automatically removes a data point from the calibration, and then tests it as an unknown. Separate validation tests the results on a different set of standards to determine the performance of the method on actual unknowns. In both cases, the correlation ( $R^2$ ) and standard error are automatically calculated. The separate validation feature can also be accessed directly from the home page. An existing model can be tested quickly on a new set of data, making it easy to check the performance of a model currently in use.



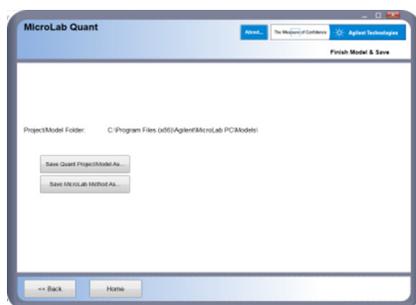
**1** Start a new model



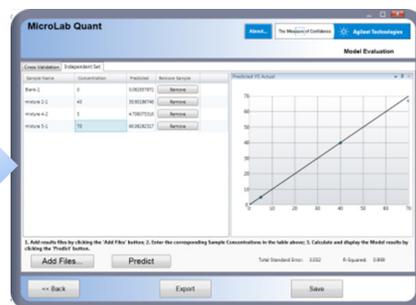
**2** Choose standards, enter concentration and model type



**3** Define peaks and optimize calibration



**4** Save complete method



**5** Evaluate with cross or separate validation

## Compatibility

### Software:

- Microlab PC, version 5.1 (or higher)
- Microlab Mobile, version 5.1 (or higher)

### Products:

- Cary 630 FTIR
- 4100 ExoScan FTIR
- 4200 FlexScan FTIR
- 4300 Handheld FTIR
- 4500 Series FTIR
- 5500 Series FTIR

[Request a Quote: Visit the MicroLab product detail page today to request a quotation or more information.](#)

[www.agilent.com](http://www.agilent.com)

This information is subject to change without notice.

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