

# KnowItAll® UV-Vis Spectral Library

## World's Largest UV-Vis Library

Bio-Rad's KnowItAll® UV-Vis Spectral Library of small organic molecules is the world's largest commercial collection of UV-Visible spectra. Measured in Bio-Rad's Laboratories, the collection is unparalleled in its quality and quantity.

### Features

- Access over 30,000 high-quality UV-Vis spectra
- Library of pure organics representing a wide range of functional groups and classifications
- Along with spectra, records contain physical properties and structures when available
- Access the most recent data as it is added to the library
- Cost-effective way to access the most comprehensive UV-Vis spectral library

This library includes the KnowItAll ID Expert™ search software at no additional charge.

### Applications

This library is extremely useful in determining the absorbance qualities of compounds. Access compounds within application areas such as material sciences, pharmaceuticals, forensics, paints, pigments, dyes, and more.

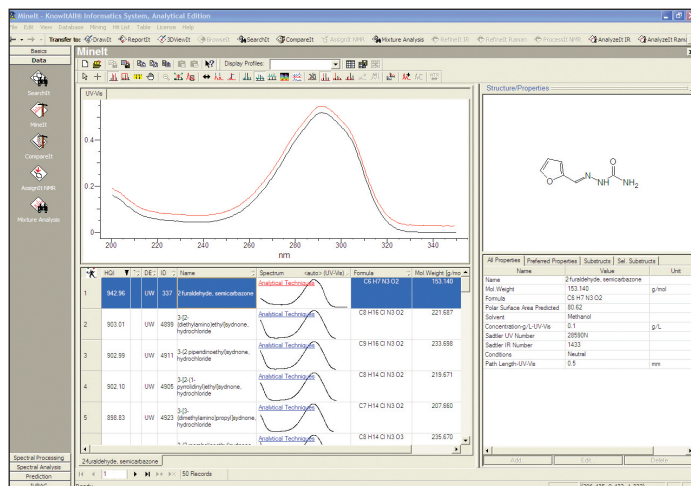
### Highest-Quality Spectra

All spectra processed according to our Sadtler™ Data Review Protocol to ensure they are of the highest quality. These rigorous qualification procedures start at data acquisition and continue throughout the Library development process.

### Additional Information Included in Library

In order to make both qualitative and quantitative aspects of the curves more evident, each spectrum is provided with additional data when available:

- |                              |   |
|------------------------------|---|
| • Name                       | • Conditions                                  |
| • Chemical Structure         | • Polar Surface Area                          |
| • Molecular Formula & Weight | • Molar Absorptivity (extinction coefficient) |
| • Solvent                    | • Absorbance Values                           |
| • Concentration              |   |
| • Path Length                |   |



### Includes the Following Spectral Databases

- UV-Vis - 200 to 350 nm - Bio-Rad Sadtler
- UV-Vis - 200 to 500 nm - Bio-Rad Sadtler
- UV-Vis - 200 to 800 nm - Bio-Rad Sadtler
- UV-Vis - Forensics - 200 to 500 nm - Bio-Rad Sadtler

Spectral ranges were chosen depending on nature of the compound.

### Instrumentation

All spectra in this collection were prepared by Bio-Rad Laboratories on a Beckman Model 25, Cary 15, Varian DMS-300, or Shimadzu UV PC spectrometer. When acidic or basic moieties were present in the structure, the spectra were run in neutral, basic, and/or acidic conditions to observe shifts and absorbance changes in the spectra.

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