



## Spectroscopy Databases & Software

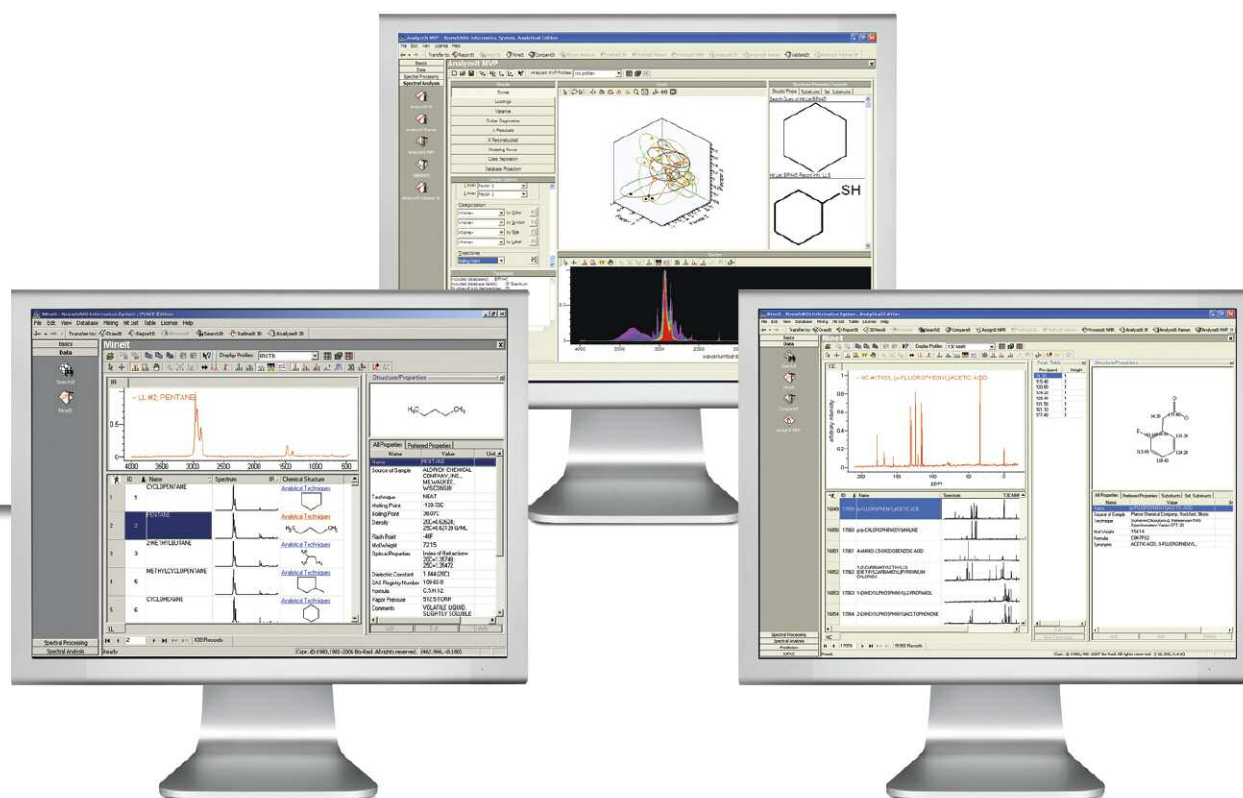


# The Leader in Spectral Databases & Software

Bio-Rad offers over 2.3 million high-quality IR, MS, NMR, Raman, and UV-Vis spectra (including Sadtler data). Collections cover pure compounds and a broad range of commercial products. They are ideal for interpretation, identification, verification, and classification of spectra.

Bio-Rad's award-winning KnowItAll software also offers solutions to manage and analyze multiple types of spectral and chemical data in multiple file and instrument formats.

This unique combination of spectral software combined with high-quality spectral reference data gives chemists the most advanced technology available for spectral analysis.



**World's Largest IR Spectral Library**

Bio-Rad's KnowItAll IR Spectral Library offers access to over 264,000 infrared spectra—the world's largest and fastest-growing collection of reference-quality IR spectra. This resource can be used with Bio-Rad's KnowItAll software or search software from a number of IR instrument vendors to identify unknown spectra.

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

**The KnowItAll IR Spectral Library provides annual access to the following databases:**

ATR-IR - Controlled & Prescription Drugs 1 - Bio-Rad Sadtler  
 ATR-IR - Controlled & Prescription Drugs 2 - Bio-Rad Sadtler  
 ATR-IR - Controlled & Prescription Drugs 3 - Bio-Rad Sadtler  
 ATR-IR - Flavors & Fragrances - Bio-Rad Sadtler  
 ATR-IR - Inorganics 1 - Bio-Rad Sadtler  
 ATR-IR - Inorganics 2 - Bio-Rad Sadtler  
 ATR-IR - NIOSH Pocket Guide to Chemical Hazards Compounds - Bio-Rad Sadtler  
 ATR-IR - Nutraceuticals 1 - Bio-Rad Sadtler  
 ATR-IR - Nutraceuticals 2 - Bio-Rad Sadtler  
 ATR-IR - Organometallics 1 - Bio-Rad Sadtler  
 ATR-IR - Organometallics 2 - Bio-Rad Sadtler  
 ATR-IR - Plasticizers - Bio-Rad Sadtler  
 ATR-IR - Polymers - Bio-Rad Sadtler  
 ATR-IR - Polymers & Monomers (Basic) 1 - Bio-Rad Sadtler  
 ATR-IR - Polymers & Monomers (Basic) 2 - Bio-Rad Sadtler  
 ATR-IR - Polymers & Monomers (Basic) 3 - Bio-Rad Sadtler  
 ATR-IR - Polymers & Monomers (Basic) 4 - Bio-Rad Sadtler  
 ATR-IR - Solvents - Bio-Rad Sadtler  
 ATR-IR - Standards 1 - Bio-Rad Sadtler  
 ATR-IR - Standards 2 - Bio-Rad Sadtler  
 ATR-IR - Standards 3 - Bio-Rad Sadtler  
 ATR-IR - Standards 4 - Bio-Rad Sadtler  
 ATR-IR - Standards 5 - Bio-Rad Sadtler  
 ATR-IR - Standards 6 - Bio-Rad Sadtler  
 ATR-IR - Standards 7 - Bio-Rad Sadtler  
 SWGDRUG Library - Bio-Rad Sadtler  
 IR - Adhesives & Sealants - Bio-Rad Sadtler  
 IR - Adhesives & Sealants (Subset) - Bio-Rad Sadtler  
 IR - Automobile Paint Chips  
 IR - Canadian Forensics  
 IR - Coating Chemicals - Bio-Rad Sadtler  
 IR - Coating Chemicals (Revised) - Bio-Rad Sadtler  
 IR - Commonly Abused Drugs (Acid) - Bio-Rad Sadtler  
 IR - Commonly Abused Drugs (Base) - Bio-Rad Sadtler  
 IR - Controlled & Prescription Drugs 1 - Bio-Rad Sadtler  
 IR - Dyes - Bio-Rad Sadtler  
 IR - Dyes, Pigments & Stains - Bio-Rad Sadtler  
 IR - Electric Power Plant Materials - Bio-Rad Sadtler  
 IR - EPA Vapor Phase - Bio-Rad Sadtler  
 IR - Epoxy Resins, Curing Agents & Additives - Bio-Rad Sadtler  
 IR - Fats, Waxes & Derivatives - Bio-Rad Sadtler  
 IR - Fibers & Textile Chemicals - Bio-Rad Sadtler  
 IR - Fibers by Microscope - Bio-Rad Sadtler  
 IR - Flame Retardants - Bio-Rad Sadtler  
 IR - Flavors & Fragrances - Bio-Rad Sadtler  
 IR - Flavors, Fragrances & Oils - Bio-Rad Sadtler  
 IR - Food Additives - Bio-Rad Sadtler  
 IR - Food Additives (Revised) - Bio-Rad Sadtler  
 IR - Gases & Vapors - Bio-Rad Sadtler  
 IR - Georgia State Crime Lab  
 IR - Industrial Chemicals, Basic Organic Compounds - Wiley  
 IR - Industrial Chemicals, Pure Organic Compounds - Wiley  
 IR - Inorganics - Bio-Rad Sadtler  
 IR - Inorganics (Subset) - Bio-Rad Sadtler  
 IR - Intermediates - Bio-Rad Sadtler  
 IR - Intermediates (Basic) - Bio-Rad Sadtler  
 IR - Lubricant Additives 1 - Bio-Rad Sadtler/IR - Lubricant Additives 2 - Bio-Rad Sadtler  
 IR - Lubricants 1 - Bio-Rad Sadtler  
 IR - Lubricants 2 - Bio-Rad Sadtler  
 IR - Merck - Bio-Rad Sadtler  
 IR - Minerals & Clays - Bio-Rad Sadtler  
 IR - NIOSH Pocket Guide to Chemical Hazards Compounds - (Vapor Phase) - Bio-Rad Sadtler  
 IR - NIOSH Pocket Guide to Chemical Hazards Compounds - Bio-Rad Sadtler  
 IR - Organometallics - Bio-Rad Sadtler  
 IR - Organosilicons  
 IR - Pesticides & Agricultural Chemicals - Bio-Rad Sadtler  
 IR - Petroleum Chemicals - Bio-Rad Sadtler  
 IR - Pharmaceuticals - Bio-Rad Sadtler  
 IR - Plasticizers - Bio-Rad Sadtler  
 IR - Polymer Additives - Bio-Rad Sadtler  
 IR - Polymer Additives (Revised) - Bio-Rad Sadtler  
 IR - Polymer Additives, Hummel Industrial - Wiley  
 IR - Polymer Processing Chemicals - Bio-Rad Sadtler Scholl  
 IR - Polymers & Monomers (Basic) 1 - Bio-Rad Sadtler  
 IR - Polymers & Monomers (Basic) 2 - Bio-Rad Sadtler  
 IR - Polymers & Monomers (Basic) 3 - Bio-Rad Sadtler  
 IR - Polymers & Monomers (Comprehensive) - Bio-Rad Sadtler  
 IR - Polymers & Monomers (Subset) 1 - Bio-Rad Sadtler  
 IR - Polymers & Monomers (Subset) 2 - Bio-Rad Sadtler  
 IR - Polymers, Controlled Pyrolyzates - Bio-Rad Sadtler  
 IR - Polymers, Hummel - Bio-Rad Sadtler  
 IR - Polymers, Hummel Defined - Wiley  
 IR - Polymers, Hummel Defined Basic - Wiley  
 IR - Polymers, Hummel Industrial - Wiley  
 IR - Polymers, Hummel Industrial Monomers - Wiley  
 IR - Polymers, Hummel Industrial Polymers - Wiley  
 IR - Polyols - Bio-Rad Sadtler  
 IR - Prepared & Prescription Drugs (Acid) - Bio-Rad Sadtler/IR - Prepared & Prescription Drugs (Base) - Bio-Rad Sadtler  
 IR - Priority Pollutants - Bio-Rad Sadtler/IR - Priority Pollutants (Vapor Phase) - Bio-Rad Sadtler  
 IR - Rubber Chemicals - Bio-Rad Sadtler  
 IR - Rubber Chemicals (Revised) - Bio-Rad Sadtler  
 IR - Solvents - Bio-Rad Sadtler  
 IR - Solvents (Basic) - Bio-Rad Sadtler  
 IR - Solvents (Vapor Phase) - Bio-Rad Sadtler  
 IR - Standards 1 - Bio-Rad Sadtler  
 IR - Standards 2 - Bio-Rad Sadtler  
 IR - Standards 3 - Bio-Rad Sadtler  
 IR - Standards 4 - Bio-Rad Sadtler  
 IR - Standards 4 - Bio-Rad Sadtler  
 IR - Standards 5 - Bio-Rad Sadtler  
 IR - Standards 6 - Bio-Rad Sadtler  
 IR - Standards (Comprehensive) - Bio-Rad Sadtler  
 IR - Standards (Selected Subset) - Bio-Rad Sadtler  
 IR - Standards (Subset) 1 - Bio-Rad Sadtler  
 IR - Standards (Subset) 2 - Bio-Rad Sadtler  
 IR - Standards (Vapor Phase Comprehensive) - Bio-Rad Sadtler  
 IR - Standards (Vapor Phase Selected Subset) - Bio-Rad Sadtler  
 IR - Steroids 2 - Bio-Rad Sadtler  
 IR - Steroids, Androgens, Progestins, & Estrogens - Bio-Rad Sadtler  
 IR - Surfactants (Basic) - Bio-Rad Sadtler  
 IR - Surfactants (Comprehensive) - Bio-Rad Sadtler  
 IR - Surfactants (Subset) 1 - Bio-Rad Sadtler  
 IR - Surfactants (Subset) 2 - Bio-Rad Sadtler  
 IR - Surfactants, Hummel - Wiley  
 IR - University Standards - Bio-Rad Sadtler  
 IR - Water Treatment Chemicals - Bio-Rad Sadtler  
 NIR - Common Organic Compounds (High) - Wiley, (Low) - Wiley

# IR Databases

## Individual IR Databases

All IR database purchases include KnowItAll ID Expert search software and ATR-IR Solvent Database at no additional charge.

Product Code	Description	Number of Spectra
<b>Polymers &amp; Related Compounds</b>		
410700	ATR-IR - Polymers - Bio-Rad Sadtler	2,395
448500	ATR-IR - Polymers & Monomers (Basic) 1 - Bio-Rad Sadtler	500
449300	ATR-IR - Polymers & Monomers (Basic) 2 - Bio-Rad Sadtler	570
449800	ATR-IR - Polymers & Monomers (Basic) 3 - Bio-Rad Sadtler	455
461100	ATR-IR - Polymers & Monomers (Basic) 4 - Bio-Rad Sadtler	435
447600	IR - Acrylates & Methacrylates - Bio-Rad Sadtler	475
433000	IR - Adhesives & Sealants - Bio-Rad Sadtler	2,075
423000	IR - Adhesives & Sealants (Subset) - Bio-Rad Sadtler	520
421300	IR - Coating Chemicals (Revised) - Bio-Rad Sadtler	720
427000	IR - Electric Power Plant Materials - Bio-Rad Sadtler	1,070
436300	IR - Epoxy Resins, Curing Agents & Additives - Bio-Rad Sadtler	690
420400	IR - Flame Retardants - Bio-Rad Sadtler	595
424800	IR - Polymer Additives (Revised) - Bio-Rad Sadtler	1,745
465400	IR - Polymer Additives, Hummel Industrial - Wiley	1,520
423200	IR - Polymer Processing Chemicals - Bio-Rad Sadtler Scholl	1,155
439900	IR - Polymeric Compounds - Bio-Rad Sadtler	470
421900	IR - Polymers & Monomers (Basic) 1 - Bio-Rad Sadtler	1,485
422500	IR - Polymers & Monomers (Basic) 2 - Bio-Rad Sadtler	850
321900	IR - Polymers & Monomers (Comprehensive) - Bio-Rad Sadtler	11,270
422000	IR - Polymers & Monomers (Subset) 1 - Bio-Rad Sadtler	1,795
422300	IR - Polymers & Monomers (Subset) 2 - Bio-Rad Sadtler	1,705
434000	IR - Polymers, Controlled Pyrolyzates - Bio-Rad Sadtler	2,965
422200	IR - Polymers, Hummel - Bio-Rad Sadtler	1,905
465500	IR - Polymers, Hummel Defined - Wiley	2,335
465600	IR - Polymers, Hummel Defined Basic - Wiley	1,040
465100	IR - Polymers, Hummel Industrial - Wiley	5,000
465300	IR - Polymers, Hummel Industrial Monomers - Wiley	1,565
465200	IR - Polymers, Hummel Industrial Polymers - Wiley	1,910
433700	IR - Plasticizers - Bio-Rad Sadtler	1,485
447500	IR - Protective Materials - Bio-Rad Sadtler	770
424300	IR - Rubber Chemicals (Revised) - Bio-Rad Sadtler	585
<b>Pure Organic Compounds</b>		
450000	ATR-IR - Standards 1 - Bio-Rad Sadtler	1,000
450100	ATR-IR - Standards 2 - Bio-Rad Sadtler	1,000
450200	ATR-IR - Standards 3 - Bio-Rad Sadtler	1,000
450300	ATR-IR - Standards 4 - Bio-Rad Sadtler	1,000
450400	ATR-IR - Standards 5 - Bio-Rad Sadtler	1,000
450500	ATR-IR - Standards 6 - Bio-Rad Sadtler	1,000
438100	IR - Alcohols & Phenols - Bio-Rad Sadtler	1,920
438200	IR - Aldehydes - Bio-Rad Sadtler	690
438300	IR - Amino Acids & Peptides - Bio-Rad Sadtler	790
438400	IR - Anhydrides & Lactones - Bio-Rad Sadtler	325
438500	IR - Carboxylic Acids - Bio-Rad Sadtler	1,515
438600	IR - Dyes, Alkynes & Azo Compounds - Bio-Rad Sadtler	940
438700	IR - Esters - Bio-Rad Sadtler	1,805
420500	IR - Gases & Vapors - Bio-Rad Sadtler	145
439000	IR - Hydrocarbons - Bio-Rad Sadtler	1,055
439100	IR - Hydrocarbons & Halogenated Hydrocarbons - Bio-Rad Sadtler	1,885
465900	IR - Industrial Chemicals, Basic Organic Compounds - Wiley	1,000
465800	IR - Industrial Chemicals, Pure Organic Compounds - Wiley	20,315
422900	IR - Intermediates (Basic) - Bio-Rad Sadtler	490
439200	IR - Ketones - Bio-Rad Sadtler	1,815
424500	IR - Merck - Bio-Rad Sadtler	2,945
439300	IR - Nucleic Acids, Nucleosides & Nucleotides - Bio-Rad Sadtler	1,450
439400	IR - Organometallics, Inorganics, & Compounds with Si, B or D - Bio-Rad Sadtler	1,145
439500	IR - Phosphorus Compounds - Bio-Rad Sadtler	1,110
436000	IR - Solvents (Basic) - Bio-Rad Sadtler	635
436200	IR - Solvents (Vapor Phase) - Bio-Rad Sadtler	620
480100	IR - Standards 1 - Bio-Rad Sadtler	1,000
480200	IR - Standards 2 - Bio-Rad Sadtler	1,000
480300	IR - Standards 3 - Bio-Rad Sadtler	1,000
480400	IR - Standards 4 - Bio-Rad Sadtler	1,000
320100	IR - Standards (Comprehensive) - Bio-Rad Sadtler	75,545
420200	IR - Standards (Selected Subset) - Bio-Rad Sadtler	2,495
426000	IR - Standards (Subset) 1 - Bio-Rad Sadtler	9,995
400000	IR - Standards (Subset) 2 - Bio-Rad Sadtler	2,500
320300	IR - Standards (Vapor Phase Comprehensive) - Bio-Rad Sadtler	9,185

Product Code	Description	Number of Spectra
422800	IR - Standards (Vapor Phase Selected Subset) - Bio-Rad Sadtler	485
405000	IR - Starter Database - Bio-Rad Sadtler	11,780
439700	IR - Sugars & Carbohydrates - Bio-Rad Sadtler	570
439800	IR - Sulfur Compounds - Bio-Rad Sadtler	1,095
420100	IR - University Standards - Bio-Rad Sadtler	300
<b>Industrial Compounds</b>		
432500	IR - Fats, Waxes & Derivatives - Bio-Rad Sadtler	1,800
432900	IR - Intermediates - Bio-Rad Sadtler	835
425500	IR - Lubricant Additives 1 - Bio-Rad Sadtler	1,570
	IR - Lubricant Additives 2 - Bio-Rad Sadtler	
421700	IR - Lubricants 1 - Bio-Rad Sadtler	885
420800	IR - Petroleum Chemicals - Bio-Rad Sadtler	320
422600	IR - Polyols - Bio-Rad Sadtler	270
432700	IR - Solvents - Bio-Rad Sadtler	915
436700	IR - Surfactants (Basic) - Bio-Rad Sadtler	850
323500	IR - Surfactants (Comprehensive) - Bio-Rad Sadtler	10,005
423500	IR - Surfactants (Subset) 1 - Bio-Rad Sadtler	1,795
425200	IR - Surfactants (Subset) 2 - Bio-Rad Sadtler	1,700
465700	IR - Surfactants, Hummel - Wiley	1,030
<b>Forensic Sciences</b>		
447900	ATR-IR - Controlled & Prescription Drugs 1 - Bio-Rad Sadtler	1,160
448800	ATR-IR - Controlled & Prescription Drugs 2 - Bio-Rad Sadtler	1,080
448900	ATR-IR - Controlled & Prescription Drugs 3 - Bio-Rad Sadtler	1,010
449000	ATR-IR - Nutraceuticals 1 - Bio-Rad Sadtler	670
447800	ATR-IR - Steroids, Androgens, Progestins, & Estrogens - Bio-Rad Sadtler	305
447200	IR - Biochemicals - Bio-Rad Sadtler	590
421200	IR - Canadian Forensics	3,495
421400	IR - Commonly Abused Drugs (Acid) - Bio-Rad Sadtler	585
	IR - Commonly Abused Drugs (Base) - Bio-Rad Sadtler	
421600	IR - Dyes - Bio-Rad Sadtler	520
431600	IR - Dyes, Pigments & Stains - Bio-Rad Sadtler	2,550
438800	IR - Explosive Materials - Bio-Rad Sadtler	720
420300	IR - Fibers & Textile Chemicals - Bio-Rad Sadtler	485
436400	IR - Fibers by Microscope - Bio-Rad Sadtler	450
447400	IR - Flavors & Fragrances (Vapor Phase) - Bio-Rad Sadtler	495
436500	IR - Flavors, Fragrances & Oils - Bio-Rad Sadtler	870
467100	IR - Food Additives (Revised) - Bio-Rad Sadtler	995
460400	IR - Georgia State Crime Lab	1,910
447100	IR - Pharmaceutical Excipients - Bio-Rad Sadtler	880
443100	IR - Pharmaceuticals - Bio-Rad Sadtler	565
445700	IR - Prepared & Prescription Drugs (Acid) - Bio-Rad Sadtler	885
	IR - Prepared & Prescription Drugs (Base) - Bio-Rad Sadtler	
439600	IR - Steroids 1 - Bio-Rad Sadtler	865
420900	IR - Steroids 2 - Bio-Rad Sadtler	245
447700	IR - Steroids, Androgens, Progestins, & Estrogens - Bio-Rad Sadtler	305
<b>Environmental Application</b>		
438900	IR - HAZMAT (Hazardous Materials) - Bio-Rad Sadtler	415
436600	IR - Pesticides & Agricultural Chemicals - Bio-Rad Sadtler	1,025
447300	IR - Pollutants (Vapor Phase) - Bio-Rad Sadtler	905
447000	IR - Priority Pollutants - Bio-Rad Sadtler	475
	IR - Priority Pollutants (Vapor Phase) - Bio-Rad Sadtler	
461000	IR - EPA Vapor Phase - Bio-Rad Sadtler	3,235
421000	IR - Water Treatment Chemicals - Bio-Rad Sadtler	295
<b>Inorganics &amp; Organometallics</b>		
448600	ATR-IR - Inorganics 1 - Bio-Rad Sadtler	265
448700	ATR-IR - Organometallics 1 - Bio-Rad Sadtler	175
435900	IR - Inorganics - Bio-Rad Sadtler	1,105
445900	IR - Inorganics (Subset) - Bio-Rad Sadtler	245
420600	IR - Minerals & Clays - Bio-Rad Sadtler	425
420700	IR - Organometallics - Bio-Rad Sadtler	345
<b>NIR</b>		
466000	NIR - Common Organic Compounds (High) - Wiley, (Low) - Wiley	3,800

# Raman Databases

## KnowItAll Raman Spectral Library (Annual Subscription)

Product Code 894010 24,000 Spectra

Bio-Rad's KnowItAll Raman Spectral Library offers access to over 24,000 Raman spectra—the world's largest collection of reference-quality Raman spectra. This resource can be used with Bio-Rad's KnowItAll software or search software from a number of Raman instrument vendors to identify unknown spectra.

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

### The KnowItAll Raman Spectral Library provides annual access to the following databases:

- Raman - Controlled & Prescription Drugs 1 - Bio-Rad Sadtler
- Raman - Controlled & Prescription Drugs 2 - Bio-Rad Sadtler
- Raman - Controlled & Prescription Drugs 3 - Bio-Rad Sadtler
- Raman - Flavors & Fragrances - Bio-Rad Sadtler
- Raman - Inorganics - Bio-Rad Sadtler
- Raman - JASCO
- Raman - Nutraceuticals - Bio-Rad Sadtler
- Raman - Organometallics - Bio-Rad Sadtler
- Raman - Polymers & Monomers (Basic) 1 - Bio-Rad Sadtler
- Raman - Polymers & Monomers (Basic) 2 - Bio-Rad Sadtler
- Raman - Polymers & Processing Chemicals - Bio-Rad Sadtler
- Raman - Standards 1 - Bio-Rad Sadtler
- Raman - Standards 2 - Bio-Rad Sadtler
- Raman - Standards 3 - Bio-Rad Sadtler
- Raman - Standards 4 - Bio-Rad Sadtler
- Raman - Standards 5 - Bio-Rad Sadtler
- Raman - Standards 6 - Bio-Rad Sadtler
- Raman - Standards 7 - Bio-Rad Sadtler
- Raman - Biomaterials - HORIBA
- Raman - Forensic - HORIBA
- Raman - Minerals - HORIBA
- Raman - Minerals (FT) - HORIBA
- Raman - Semiconductor Materials - HORIBA
- Raman - Aldrich Library of Raman Spectra - Wiley

## Individual Raman Databases

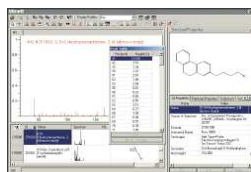
*All Raman database purchases include the KnowItAll ID Expert search software at no additional charge.*

Product Code	Description	Number of Spectra
470300	Raman - Controlled & Prescription Drugs 1 - Bio-Rad Sadtler	855
470600	Raman - Controlled & Prescription Drugs 2 - Bio-Rad Sadtler	995
477500	Raman - Flavors & Fragrances - Bio-Rad Sadtler	600
470200	Raman - Inorganics - Bio-Rad Sadtler	1,630
470100	Raman - Polymers & Monomers (Basic) 1 - Bio-Rad Sadtler	1,680
477000	Raman - Polymers & Processing Chemicals - Bio-Rad Sadtler	495
471100	Raman - Standards 1 - Bio-Rad Sadtler	1,000
471200	Raman - Standards 2 - Bio-Rad Sadtler	1,000
471300	Raman - Standards 3 - Bio-Rad Sadtler	1,000
471400	Raman - Standards 4 - Bio-Rad Sadtler	1,000
471500	Raman - Standards 5 - Bio-Rad Sadtler	1,000
471600	Raman - Standards 6 - Bio-Rad Sadtler	1,000

# MS, NMR, UV-Vis Databases

## KnowItAll Mass Spectral Library (Annual Subscription)

Product Code 893010 1,136,000 Spectra



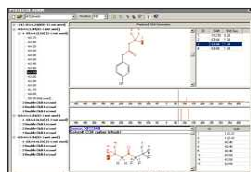
KnowItAll® Mass Spectral Library provides mass spectra selected from the highest-quality resources available. Search by peak, name, structure, substructure, and property fields, such as technique, molecular weight, CAS Registry Number, etc. Database also includes chemical synonyms.

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

- MS - Bio-Rad Sadtler AAFS Toxicology Section of Drugs
- MS - Bio-Rad Sadtler NIOSH Pocket Guide
- MS - NIST EPA NIH Mass Spectral Library (2017)
- MS - Wiley Androstanes & Estrogens and Other Steroids
- MS - Wiley Drugs
- MS - Wiley Geochemicals/Petrochemicals & Biomarkers
- MS - Wiley Industrial Compounds
- MS - Wiley Mass Spectral Library of Lipids
- MS - Wiley Mass Spectra of Pesticides with Retention Indices, 2<sup>nd</sup> Edition
- MS - Wiley Volatile Compounds in Food
- MS - Wiley Registry of Mass Spectral Data 11<sup>th</sup> Edition
- MS - Wiley Registry of Mass Spectral Data 11<sup>th</sup> Edition Deleted Removed Spectra
- MS - Wiley Registry of Mass Spectral Data 11<sup>th</sup> Edition Replicate Spectra
- SWGDRUG Library - Bio-Rad Sadtler (*select spectra*)

## KnowItAll NMR Spectral Library (Annual Subscription)

Product Code 892010 920,000 Spectra



Access over 573,000 <sup>13</sup>C NMR, 245,000 <sup>1</sup>H NMR and 102,000 XNMR reference spectra for reliable NMR searches and predictions. Within KnowItAll's PredictIt NMR, not only can one retrieve the spectral data used to search and build predictions, but can also access all of the available information related to the reference spectrum, such as sample source, solvent, conditions of production, equipment, and properties for the molecule.

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

### CNMR

- <sup>13</sup>CNMR - Bio-Rad Sadtler
- <sup>13</sup>CNMR - Metabolites - Bio-Rad Sadtler
- <sup>13</sup>CNMR - Polymers & Monomers - Bio-Rad Sadtler
- <sup>13</sup>CNMR - Wolfgang Robien
- <sup>13</sup>CNMR - Organic Compounds - Wiley
- <sup>13</sup>CNMR - Flavors & Fragrances - Wiley
- <sup>13</sup>CNMR - Natural Products - Wiley
- <sup>13</sup>CNMR - AIST SDBS
- <sup>13</sup>CNMR - NIOSH Pocket Guide to Chemical Hazards Compounds

### HNMR

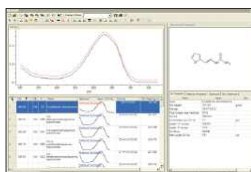
- <sup>1</sup>HNMR - Bio-Rad Sadtler
- <sup>1</sup>HNMR - Chemical Shifts - Bio-Rad Sadtler
- <sup>1</sup>HNMR - Metabolites - Bio-Rad Sadtler
- <sup>1</sup>HNMR - NIOSH Pocket Guide to Chemical Hazards Compounds
- <sup>1</sup>HNMR - Organic Compounds 1 - Wiley
- <sup>1</sup>HNMR - Organic Compounds (Comprehensive) - Wiley
- <sup>1</sup>HNMR - AIST SDBS
- <sup>1</sup>HNMR - AIST SDBS (300 MHz)
- <sup>1</sup>HNMR - AIST SDBS (400 MHz)

### XNMR

- <sup>11</sup>B NMR - Wolfgang Robien
- <sup>19</sup>F NMR - Wolfgang Robien
- <sup>15</sup>N NMR - Wolfgang Robien
- <sup>17</sup>O NMR - Wolfgang Robien
- <sup>31</sup>P NMR - Wolfgang Robien
- <sup>29</sup>Si NMR - Wolfgang Robien
- <sup>19</sup>F NMR - Wiley
- <sup>15</sup>N NMR - Wiley
- <sup>17</sup>O NMR - Wiley
- <sup>31</sup>P NMR - Wiley
- <sup>29</sup>Si NMR - Wiley

## KnowItAll UV-Vis Spectral Library (Annual Subscription)

Product Code 876310 30,000 Spectra



This reference database is extremely useful when trying to identify or classify unknown UV-Vis spectra. Applications include pharmaceutical, forensic, environmental, materials sciences, polymers, and many others. Search by spectra, peak, name, structure, substructure and property fields, such as formula, molecular weight, solvent, concentration, and path length. Peak tables contains the position of the peak, the height of the peak, the absorption, and the extinction coefficient.

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

- 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

## KnowItAll Vibrational Spectroscopy Edition

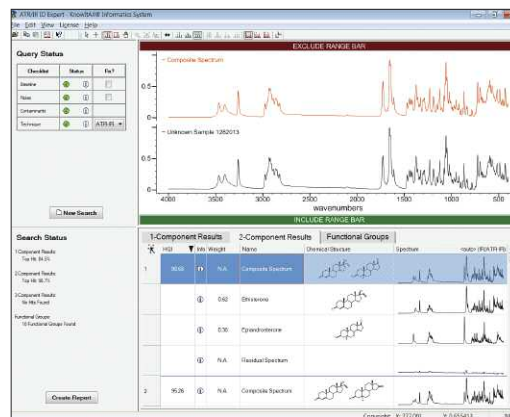
Product Code 888300

Techniques: IR, NIR, Raman

Bio-Rad's award-winning **KnowItAll Informatics System - Vibrational Spectroscopy Edition** offers comprehensive software solutions for infrared, near infrared, and Raman spectroscopy in a single, integrated interface.

Software package includes all the following tools:

- Spectral Search
- Spectral Identification
- IR Spectral Deformation
- Mixture Analysis
- Functional Group Analysis - IR, Raman, IR Polymer
- Over 12,000 IR Spectra
- Spectral Data Management (Database Building)
- Processing & Subtraction
- Quality Control Analysis
- Chemical Structure Drawing - ChemWindow®
- Reporting Tools
- Training Resources
- Patented Overlap Density Heatmap Technology for Data Visualization
- Patent-Pending Technology to Optimize Spectral Search



Includes cutting-edge technologies only available from Bio-Rad, as spectral intelligence is continually added to the KnowItAll software, helping chemists find the best answers and extract the most knowledge from spectral data.

Supports file formats from all major IR and Raman spectrometer instrument vendors.

## KnowItAll Analytical Edition

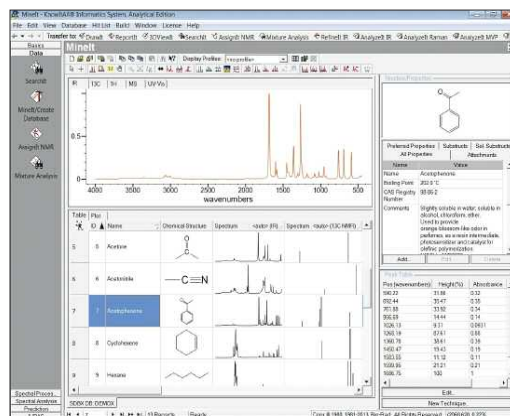
Product Code 890200

Techniques: IR, Raman, NIR, NMR, MS, UV-Vis, Chromatography

Bio-Rad's award-winning **KnowItAll Informatics System - Analytical Edition** offers comprehensive software solutions for spectroscopy in a single, integrated interface.

Software package includes all the following tools:

- Spectral Search
- Spectral Identification
- IR Spectral Deformation
- Mixture Analysis
- Functional Group Analysis - IR, Raman, IR Polymer
- Spectral Data Management (Database Building)
- Processing & Subtraction
- NMR Assignment
- NMR Prediction
- Quality Control Analysis
- Chemical Structure Drawing - ChemWindow®
- Reporting Tools
- Training Resources
- Patented Overlap Density Heatmap Technology for Data Visualization
- Patent-Pending Technology to Optimize Spectral Search



Includes cutting-edge technologies only available from Bio-Rad, as spectral intelligence is continually added to the KnowItAll software, helping chemists find the best answers and extract the most knowledge from spectral data.

Supports multiple instrument vendor file formats and techniques (IR, Raman, NIR, NMR, MS, UV-Vis, chromatography).

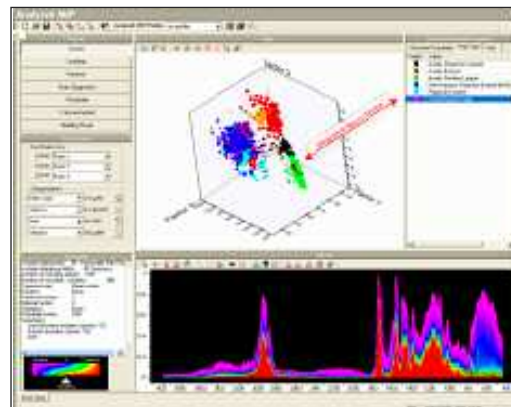


## KnowItAll Analyzelt™ MVP - Chemometrics Option for KnowItAll

Product Code 850800

Analyzelt MVP, which incorporates Infometrix's chemometrics technology for principal component analysis (from the well-known Pirouette® software), provides a powerful tool for expert and nonexpert users alike to perform multivariate analysis of spectroscopic, chromatographic, or numeric data.

- Gain insight into hidden patterns / relationships in data
- Explore correlations to answer research, development, or production questions
- Facilitate storage of results for subsequent reference, reporting, or investigation

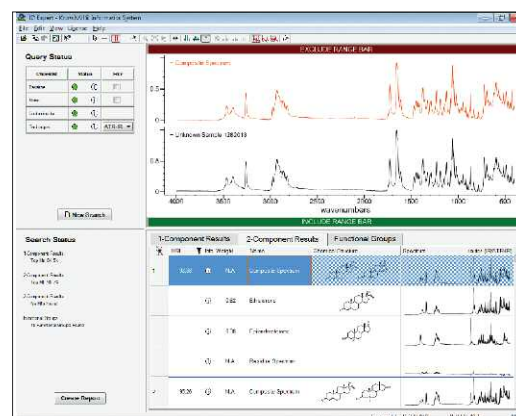


## KnowItAll ID Expert™ Edition ★ Free with Any Database Purchase

KnowItAll ID Expert is a completely new technology that incorporates Bio-Rad's years of accumulated knowledge with tremendous computational power to provide the fastest, most accurate answers possible to scientists identifying unknown spectra.

Simply open an unknown spectrum and KnowItAll ID Expert automatically performs single component searches, multiple component searches, peak search, and functional group analyses simultaneously and summarizes the results on a single screen to give a complete view of all possibilities for the unknown spectrum. If there are problems with the user's query spectrum, ID Expert has the spectral intelligence to identify these issues and suggest ways to fix them.

*The spectral intelligence built into KnowItAll ID Expert when used with Bio-Rad's KnowItAll Spectral Libraries provides the highest level of expertise to any scientist, whether a novice or power user.*

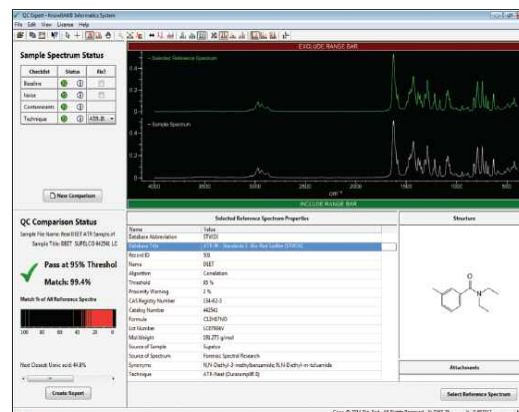


## KnowItAll QC Expert™ Edition

Product Code 887000

Bio-Rad's KnowItAll QC Expert software performs a rapid quality check of a sample IR or Raman spectrum against a "gold standard" user spectrum to verify that a material meets control specifications.

- Perform QC comparison of a sample spectrum to a selected reference spectrum
- Validate results by also comparing the sample to a reference database to ensure the sample not only matches the selected reference spectrum, but that it also does not match anything else in the database
- Define user privileges, reference data, and other settings to ensure technicians follow set protocols and focus on output
- Identify problems with the sample spectrum - QC Expert's built-in spectral intelligence identifies issues and suggests ways to fix them
- Generate tamper-evident, digitally-signed reports
- 21 CFR Part 11-compliant



## Campus-Wide Access to Over 2 Million Spectra

KnowItAll® U offers all faculty and students—at any computer—unlimited access to over 2 million spectra (with related properties and structures), including IR, MS, NMR, Raman, and UV-Vis.

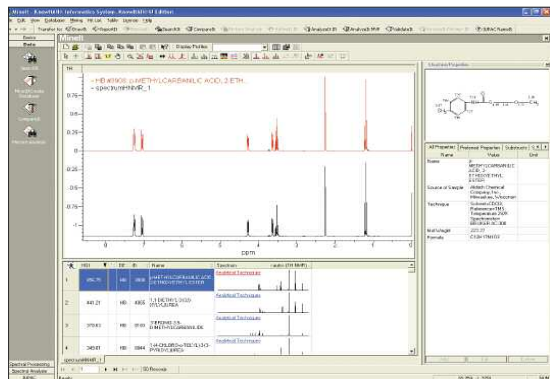
**Unlimited simultaneous users** can search the KnowItAll U Spectral Library by full spectrum, peak, structure, substructure, property (name, molecular weight, CAS Registry Number, boiling point, etc.), or any combination.

## Search with KnowItAll AnyWare™ - A Simple Web Browser Interface



- Access the entire KnowItAll U data collection
- Simple, intuitive interface for users at any level
- Use with any operating system, including Windows, Macintosh, or Linux

## Search with KnowItAll Desktop Software For Advanced Analyses



KnowItAll U may also include unlimited downloads of the KnowItAll desktop software, depending on the package chosen. In addition to spectral search tools, this software provides multiple tools for chemistry and related disciplines—all within a single user interface.

- Spectral Search
- Spectral Identification
- IR Spectral Deformation
- Mixture Analysis
- Functional Group Analysis - IR, Raman, IR Polymer
- Spectral Data Management (Database Building)
- Processing & Subtraction
- NMR Assignment
- NMR Prediction
- Quality Control Analysis
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- Patented Overlap Density Heatmap Technology for Data Mining
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