Spectroscopy

Databases & Software

BIO-RAD

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Databases & Software for Spectroscopy

Bio-Rad's Informatics Division specializes in database and software solutions for the scientific community.

Spectral Databases - Over 1.3 Million Spectra, Including Sadtler Data

Bio-Rad offers over 1.3 million high-quality IR, MS, NMR, NIR, 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. Choose from individual databases or HaveItAll annual licenses.

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Bio-Rad specializes in software solutions to manage and analyze *multiple* types of spectral and chemical data in *multiple* file and instrument formats.

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Spectral Databases

Bio-Rad offers over 1.3 million high-quality IR, MS, NMR, NIR, 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. Choose from individual databases or HaveItAll annual licenses.

See description and index for each database at www.knowitall.com/literature.

IR Databases: ATR-IR

Contains Structures

ATR-IR - Controlled & Prescription Drugs 1 - Bio-Rad Sadtler

Product Code 447900 1,160 Spectra

This database contains ATR-IR spectra of controlled and prescription drugs as well as steroids that may be of interest to forensic laboratories or any researcher analyzing drug samples.

ATR-IR - Controlled & Prescription Drugs 2 - Bio-Rad Sadtler

Product Code 448800 1,080 Spectra

This database contains additional ATR-IR spectra of controlled and prescription drugs as well as steroids that may be of interest to forensic laboratories or any researcher analyzing drug samples.

ATR-IR - Inorganics 1 - Bio-Rad Sadtler

Product Code 448600 260 Spectra

ATR-IR database with spectra of inorganic compounds. The spectra are representative of many anions and polyatomic ions common to inorganic materials.

ATR-IR - Nutraceuticals - Bio-Rad Sadtler

Product Code 449000 670 Spectra

This database contains ATR-IR spectra to show some of the latest products available and diversity of the nutraceutical market. It can be used by food laboratories, pharmaceutical companies, and testing labs who are interested in the identification of compounds by infrared spectroscopy.

ATR-IR - Organometallics 1 - Bio-Rad Sadtler

Product Code 448700 170 Spectra

ATR-IR database compiled specifically for scientists interested in organometallic chemistry. Samples have been solicited from industrial concerns and academic and research institutions in an attempt to select a cross section of compounds of interest.

ATR-IR - Polymers - Bio-Rad Sadtler

Product Code 410700 2,390 Spectra

Collection of ATR-IR reference spectra of commercially available monomers, polymers, and precursors. Contains spectra used in films, coatings, finishes, and laminates.

ATR-IR - Polymers & Monomers (Basic) 1 - Bio-Rad Sadtler

Product Code 448500 500 Spectra

Collection of ATR-IR reference spectra of commercially available polymers and monomers.

ATR-IR - Polymers & Monomers (Basic) 2 - Bio-Rad Sadtler

Product Code 449300 500 Spectra

Additional collection of ATR-IR reference spectra of commercially available polymers and monomers.

ATR-IR - Solvents - Bio-Rad Sadtler

Product Code 436100 620 Spectra

Database contains ATR-IR reference spectra of common solvents.

ATR-IR - Steroids, Androgens, Progestins, & Estrogens - Bio-Rad Sadtler

Product Code 447800 300 Spectra

The database, prepared by Forensic Spectral Research, contains ATR-IR reference spectra of steroids, androgens, progestins, and estrogens useful in forensic, pharmaceutical, medical, and other applications.

Spectral Databases

IR Databases: Polymers & Related Compounds

Contains Structures

IR - Acrylates & Methacrylates - Bio-Rad Sadtler

Product Code 447600 470 Spectra

This database contains spectra of acrylic and methacrylic compounds. It includes a number of polymeric and monomeric compounds that are used in many common products.

IR - Adhesives & Sealants - Bio-Rad Sadtler

Product Code 433000 2,070 Spectra

This collection contains a wide range of basic synthetic resins and elastomers, plus cured and uncured commercial end products. Typical products are composed of rubber adhesives, contact adhesives, hot melt adhesives, silicone adhesives, pressure sensitive adhesives, cements, and sealants.

IR - Adhesives & Sealants (Subset) - Bio-Rad Sadtler

Product Code 423000 520 Spectra

The database contains adhesives and sealants in eleven classifications which have been generally established by the adhesives industry. Collection includes basic synthetic resins, elastomers, uncured materials, and cured commercial end products.

IR - Coating Chemicals (Revised) - Bio-Rad Sadtler

Product Code 421300 720 Spectra

Collection designed to provide a convenient and practical reference source of information for chemists and technologists in the coatings industry. The database is divided into two sections: Part I - Resins and Part II - Monomers, Precursors, and Additives. It is grouped by coatings classification and arranged within each group by chemical class.

IR - Electric Power Plant Materials - Bio-Rad Sadtler

Product Code 427000 1,070 Spectra

This database contains spectra of commercial products such as seals, elastomers, polymers, lubricants, and related materials used in utility plants.

IR - Epoxy Resins, Curing Agents & Additives - Bio-Rad Sadtler

Product Code 436300 690 Spectra

Database of FT-IR spectra that contain raw materials used in the production of thermoset materials, such as composites, printed circuit boards, and electronic packaging, as well as materials used in paints, sealants, adhesives, and a wide range of surface coatings.

IR - Flame Retardants - Bio-Rad Sadtler

Product Code 420400 590 Spectra

IR database with spectra of commercially available non-reactive and reactive flame retardants.

IR - Polymer Additives (Revised) - Bio-Rad Sadtler

Product Code 424800 1,740 Spectra

Bio-Rad has compiled a reference collection of infrared spectra of polymer additives to provide a convenient and practical reference source of information for polymer chemists and technologists.

IR - Polymer Additives, Hummel Industrial - Wiley

Product Code 465400 1,520 Spectra

Professor Hummel's enhanced polymer additives and auxiliaries FT-IR database provides a comprehensive reference source of information for polymer chemists and technologists. It includes the following classes: antioxidants, stabilizer (including PVC stabilizer), light stabilizer, coloring agents, brightening agents, fillers, plasticizers, elasticators, extenders, processing agents, textile auxiliaries, vulcanization agents, and rubber auxiliaries.

IR - Polymer Processing Chemicals - Bio-Rad Sadtler Scholl

Product Code 423200 1,150 Spectra

Collection includes polymer processing reagents such as plasticizers, inorganic fillers and pigments, organic pigments, UV stabilizers, fluorescent whitening agents, antioxidants, stabilizers, antistatic agents, biocides, flame retardants, accelerators, curing agents and activators, processing aids, and solvents. It first appeared as Volume Three of the *Hummel/Scholl Polymer Atlas*, which is based upon data originally prepared by Dr. Friedrick Scholl.

IR - Polymeric Compounds - Bio-Rad Sadtler

Product Code 439900 470 Spectra

This database contains basic polymers commonly encountered in both industry and academia. It includes construction polymers, elastomers, miscellaneous resins, tars, inorganic compounds, curing agents, initiators and activators, accelerators, and modifiers.

IR - Polymers & Monomers (Basic) 1 - Bio-Rad Sadtler

Product Code 421900 1,480 Spectra

Collection of products selected to provide a broad base for solving polymer and plastic analytical problems. This collection includes many classic compounds, which makes it particularly useful as a reference.

IR - Polymers & Monomers (Basic) 2 - Bio-Rad Sadtler

Product Code 422500 850 Spectra

Collection of products selected to provide a broad base for solving polymer and plastic analytical problems. This database provides additional spectra and can be used with volume one to create a comprehensive collection of basic polymeric compounds.

IR - Polymers & Monomers (Comprehensive) - Bio-Rad Sadtler

Product Code 321900 11,270 Spectra

World's largest commercially available collection of infrared spectra of monomers, polymers, catalysts, curing agents, antioxidants, stabilizers, modifiers, and other additives used in polymerization processes. The polymers include aliphatic hydrocarbons, polyesters, polyamides, sulfonated polymers, silicones, epoxy resins, vinyl and vinylidene polymers, cellulose derivatives and methacrylic polymers, heterocyclic vinyl polymers, and polymerized fats. It also includes a number of monomers.

IR - Polymers & Monomers (Subset) 1 - Bio-Rad Sadtler

Product Code 422000 1,790 Spectra

This collection contains commercial products, including additives selected to provide a broad base for solving polymer and plastic analytical problems. Product classifications include polyethylenes, polypropylenes, polystyrenes, polybutadienes, polyethers, polyacrylics, polyesters, and polyvinylpyridines. It includes many classic compounds, which makes it particularly useful as a reference. The spectra are arranged into forty-nine chemical classes and have been placed in order of increasing chemical complexity within each class.

IR - Polymers & Monomers (Subset) 2 - Bio-Rad Sadtler

Product Code 422300 1,700 Spectra

This collection of monomers, polymers, and precursors can be used by researchers engaged in compound identification, quality control, deterioration studies, materials selection, or classroom instruction. It contains spectra of commercial products and provides a broad base for solving analytical problems in the area of polymer and plastic analysis. Product classifications include polyethylenes, polypropylenes, polystyrenes, polybutadienes, polyethers, polyacrylics, polyesters, and polyvinylpyridines. Includes forty-six monomer and polymer classes.

IR - Polymers, Controlled Pyrolyzates - Bio-Rad Sadtler

Product Code 434000 2,960 Spectra

This database contains the spectra of polymers which have been pyrolyzed at a constant specified temperature. It is designed to aid in the identification of the principal polymer types.

IR - Polymers, Hummel - Bio-Rad Sadtler

Product Code 422200 1,900 Spectra

This database is a product of a cooperative effort between Professor Dieter Hummel of the University of Cologne and Bio-Rad. It includes a wide range of polymers, copolymers, and polymer additives.

IR - Polymers, Hummel Defined – Wiley

Product Code 465500 2,330 Spectra

This database contains spectra of polymers, copolymers, and polymer additives and can be used for quality control, characterization, or structure elucidation.

IR - Polymers, Hummel Defined Basic - Wiley

Product Code 465600 1,040 Spectra

This is a subset of the Hummel Defined Polymers database and contains polymers, copolymers, and polymer additives.

IR - Polymers, Hummel Industrial - Wiley

Product Code 465100 5,000 Spectra

A collection of FT-IR spectra of polymers individually reviewed by Professor Dieter O. Hummel. These compounds are actively being used in industry and were collected directly from the manufacturers or research laboratories responsible for their development.

IR - Polymers, Hummel Industrial Monomers - Wiley

Product Code 465300 1,560 Spectra

One of the world's largest commercially available collections of monomers used in polymerization processes. Includes the following monomer classes: vinyl monomers, pyrolyzates, alcohols, phenols, carboxylic acids and their salts, esters, anhydrides, amides, hydrazides, urethanes, cyanates, fulminates, heterocycles, amino and thiocarboxylic acids, sulfonamides, technical solvents, and more.

Spectral Databases

IR - Polymers, Hummel Industrial Polymers - Wiley

Product Code 465200 1,910 Spectra

Collection of natural and synthetic construction polymers, natural and synthetic fibers, elastomers, miscellaneous resins like natural resins, paint and finishing resins, impregnation and casting resins, dispersion, molding and printing inks, oils, fats, waxes, tars, inorganic compounds, adhesives, putties, cements, protective colloids, curing agents, initiators and activators, accelerators, and modifiers.

IR - Plasticizers - Bio-Rad Sadtler

Product Code 433700 1,480 Spectra

This database contains a wide range of commercially available plasticizers that are used in the processing and compounding of polymers. A partial list of the classes of compounds which appear in the collection includes formalines, hydrocarbons, lactams, mellitates, nitriles, phenoxys, and polyesters; derivatives of acids such as abietic, adipic, benzoic, caprylic, citric, fumaric, isophthalic, lauric, maleic, oleic, palmitic, phthalic, sebacic, stearic, succinic, and tartaric; and derivatives of compounds including biphenyls, epoxy resins, ethers, ethylenediamine, glycerol, glycol, and paraffin.

IR - Protective Materials - Bio-Rad Sadtler

Product Code 447500 770 Spectra

This infrared database of polymer additives includes coatings, inhibitors, stabilizers, antioxidants, antistatic agents, and preservatives.

IR - Rubber Chemicals (Revised) - Bio-Rad Sadtler

Product Code 424300 580 Spectra

The database contains the infrared spectra of rubber chemicals grouped by principal function. It includes a broad range of chemical classes used in the rubber industry, including accelerators, activators, retardants, vulcanizers, antioxidants, plasticizers, tackifiers, and stabilizers.

IR Databases: Pure Organic Compounds

Contains Structures

IR - Alcohols & Phenols - Bio-Rad Sadtler

Product Code 438100 1,920 Spectra

This database contains spectra of alcohol and phenol compounds used as solvents and in the synthesis of other compounds.

IR - Aldehydes - Bio-Rad Sadtler

Product Code 438200 690 Spectra

This database of aldehyde compounds provides access to compounds essential to the perfume and flavoring industries, as well as the manufacture of pharmaceutical intermediates and plastic additives.

IR - Amino Acids & Peptides - Bio-Rad Sadtler

Product Code 438300 790 Spectra

This database contains spectra of amino acids, peptides, and compounds with the amino acid as a unit. This collection of substances with biological importance enables users to search compounds that contain these essential building blocks.

IR - Anhydrides & Lactones - Bio-Rad Sadtler

Product Code 438400 320 Spectra

Database of infrared spectra compiled to present compounds containing these organic compounds.

IR - Carboxylic Acids - Bio-Rad Sadtler

Product Code 438500 1,520 Spectra

This database contains infrared spectra of acid compounds widely used in synthesis of other compounds.

IR - Dyes, Alkynes & Azo Compounds - Bio-Rad Sadtler

Product Code 438600 940 Spectra

This database contains spectra of dyes, alkynes, and azo compounds. It serves as a reference for those in the dye or color industry.

IR - Esters - Bio-Rad Sadtler

Product Code 438700 1,800 Spectra

This collection contains the infrared spectra of esters. The compounds are widely used in the fragrance industry, but their applications are widespread.

IR - Gases & Vapors - Bio-Rad Sadtler

Product Code 420500 140 Spectra

The spectra in this database include permanent gases, as well as vapors of volatile liquids which are frequently encountered in the laboratory and in process plants. Many of the compounds included are useful in reference to atmospheric contaminant analysis relating to current air quality standards legislation, including the National Ambient Air Quality Standards Act and the Occupational Safety and Health Standards Act. The database contains the following chemicals classes: hydrocarbons, aldehydes, freons, nitrogen compounds, and sulfur compounds.

IR - Hydrocarbons - Bio-Rad Sadtler

Product Code 439000 **1,050 Spectra**

This database contains infrared spectra of hydrocarbon compounds and provides a convenient reference for researchers.

IR - Hydrocarbons & Halogenated Hydrocarbons - Bio-Rad Sadtler

Product Code 439100 **1,880 Spectra**

This collection includes infrared spectra of hydrocarbons and halogenated hydrocarbon compounds.

IR - Industrial Chemicals, Basic Organic Compounds - Wiley

Product Code 465900 **1,000 Spectra**

Collection contains spectra of common organic compounds hand-picked from Wiley's FT-IR Organic Compounds collection.

IR - Industrial Chemicals, Pure Organic Compounds - Wiley

Product Code 465800 **20,310 Spectra**

FT-IR spectral collection of organic compounds used as industrial chemicals.

IR - Intermediates (Basic) - Bio-Rad Sadtler

Product Code 422900 **490 Spectra**

This database contains the infrared spectra of chemicals which are intermediates in the manufacture of other end products arranged in 17 major classes of compounds. Includes acids, alcohols, aldehydes, amines, nitriles, sulfides, ketones, aromatic hydrocarbons, etc.

IR - Ketones - Bio-Rad Sadtler

Product Code 439200 **1,810 Spectra**

This database contains infrared spectra of ketone compounds that can be used for identification, classification, and verification of these materials.

IR - Merck - Bio-Rad Sadtler

Product Code 424500 **2,940 Spectra**

This database was prepared from the FT-IR spectra used in the *Merck FT-IR Atlas* of pure substances from the Merck-Schuchardt program.

IR - Nucleic Acids, Nucleosides & Nucleotides - Bio-Rad Sadtler

Product Code 439300 **1,450 Spectra**

This database contains infrared spectra of nucleic compounds. This collection of compounds can be used for identification, classification, and verification of these materials and was compiled for those who are researching molecular processes.

IR - Organometallics, Inorganics, Silanes, Boranes & Deuterium Compounds - Bio-Rad Sadtler

Product Code 439400 **1,140 Spectra**

This database of infrared spectra has been compiled specifically to present compounds containing boron, silicon, and deuterium as well as organometallics and inorganics.

IR - Phosphorus Compounds - Bio-Rad Sadtler

Product Code 439500 **1,110 Spectra**

This database contains infrared spectra of phosphorus compounds and can be used for identification, classification, and verification of these materials.

IR - Solvents (Basic) - Bio-Rad Sadtler

Product Code 436000 **630 Spectra**

This database contains the FT-IR reference spectra of common solvents to aid in identification and analysis of these compounds.

IR - Solvents (Vapor Phase) - Bio-Rad Sadtler

Product Code 436200 **620 Spectra**

Database contains FT-IR reference spectra of common solvents. Spectroscopists identifying compounds in the vapor state from gas chromatography separations will find this database very useful.

IR - Standards (Comprehensive) - Bio-Rad Sadtler

Product Code 320100 **75,550 Spectra**

Comprehensive database of infrared reference spectra of organic compounds. It includes spectra of most simple aliphatic, aromatic, alicyclic, and heterocyclic compounds, as well as numerous complex materials. Numerous series of homologous compounds, ranging from the very simple to the very complex, which enable spectroscopic studies of trends involving the homologues, are also included.

Spectral Databases

IR - Standards (Selected Subset) - Bio-Rad Sadtler

Product Code 420200 **2,490 Spectra**

This database contains spectra representing a broad range of both simple and complex pure compounds. It was designed to satisfy the need for a small, convenient collection of infrared spectra of organic compounds when more comprehensive collections are not available.

IR - Standards (Subset) 1 - Bio-Rad Sadtler

Product Code 426000 **9,990 Spectra**

Database of pure organics commonly found in both academic and industrial laboratories covering a broad range of chemical classes from commercially available sources. It is frequently used in organic chemistry and other college courses to establish chemical identity through comparison of functional groups. This database can also be used as a reference for industrial laboratories to identify organic compounds using infrared spectroscopy.

IR - Standards (Subset) 2 - Bio-Rad Sadtler

Product Code 400000 **2,500 Spectra**

This database contains pure organic chemicals, which can be used to identify and classify pure samples and can serve as a reference when more comprehensive collections are not available.

IR - Standards (Vapor Phase Comprehensive) - Bio-Rad Sadtler

Product Code 320300 **9,180 Spectra**

Collection includes IR vapor phase spectra of common pure organic compounds to identify unknown compounds by GC-IR, TGA-IR, or other vapor phase methods of analysis. The compounds are critical to pollution and toxicological identification.

IR - Standards (Vapor Phase Selected Subset) - Bio-Rad Sadtler

Product Code 422800 **480 Spectra**

Provides a basic collection of compounds analyzed using the vapor phase technique and can be used as a companion to the *The Interpretation of Vapor Phase Infrared Spectra - Group Frequency Data* by Richard A. Nyquist, Ph.D.

IR - Starter Database - Bio-Rad Sadtler

Product Code 405000 **11,780 Spectra**

The Sadtler Starter Database is a collection of infrared reference spectra, including organic chemicals and trade name monomer and polymer compounds.

IR - Sugars & Carbohydrates - Bio-Rad Sadtler

Product Code 439700 **570 Spectra**

This database contains infrared spectra of sugars and carbohydrates and is useful for identification, classification, and verification of these materials. Carbohydrates contain a broad range of sugars, starches, and fibers.

IR - Sulfur Compounds - Bio-Rad Sadtler

Product Code 439800 **1,090 Spectra**

This database contains infrared spectra of sulfur compounds and is useful for identification, classification, and verification of these materials.

IR - University Standards - Bio-Rad Sadtler

Product Code 420100 **300 Spectra**

This database provides a small convenient collection of IR spectra of organic compounds relevant to college introductory courses on organic chemistry and supplementary laboratory courses on experimental organic chemistry and qualitative analysis. They are arranged by chemical class.

IR Databases: Industrial Compounds

IR - Fats, Waxes & Derivatives - Bio-Rad Sadtler

Product Code 432500 **1,800 Spectra**

Compounds in this database include animal fats and oils, animal waxes (raw and refined), fatty acids, fatty acid esters (other than triglycerides), fatty amides, fatty amines, unsaponifiable matter, other fatty derivatives, marine fats and oils, mineral waxes (crude and refined), modified mineral waxes, modified vegetable waxes, synthetic waxes, soaps, vegetable fats and oils, and vegetable waxes (raw and refined).

IR - Intermediates - Bio-Rad Sadtler

Product Code 432900 **830 Spectra**

IR database with spectra of commercially available chemicals used as precursors to desired end-products, including acids, alcohols, aldehydes, amines, ketones, nitriles, sulfides, and aromatic hydrocarbons. These compounds are used to manufacture products such as pharmaceuticals, surfactants, dyes, plasticizers, and other specialty chemicals.

IR- Lubricant Additives 1-Bio-Rad Sadtler & IR- Lubricant Additives 2 - Bio-Rad Sadtler

Product Code 425500 **1,570 Spectra**

A collection of additives used in engine oils, transmission and hydraulic fluids, gear oils, industrial oils, metalworking, and process oils. They are used in the automotive, marine, aeronautic, and petroleum industries, as well as any industry that makes use of machinery. The spectra have been run heavier than usual to compensate for the nature of the compounds.

IR - Lubricants 1 - Bio-Rad Sadtler

Product Code 421700 **880 Spectra**

This database contains infrared spectra of commercially available compounds used in a variety of industrial and automotive applications that perform these functions such as greases, hydraulic fluids, cutting oils, motor oils and metallic soaps. Included are products of petroleum origin and synthetic lubricants such as chlorofluorocarbons (CFCs), dibasic carboxylic acid esters, lubricating polymers, phosphate esters, and silicones.

IR - Petroleum Chemicals - Bio-Rad Sadtler

Product Code 420800 **320 Spectra**

These spectra are of compounds chosen from commercially available petroleum products, many of which are used in modifying and improving gasolines, fuel oils, lubricants, and other products. Some of the more than 20 classes represented in this database include antiacids, antidetonants, antioxidants, catalysts, dispersants, gum inhibitors, gum solvents, ignition control compounds, rust preventatives, viscosity improvers, etc.

IR - Polyols - Bio-Rad Sadtler

Product Code 422600 **270 Spectra**

This database contains infrared spectra of commercially available polyols. It includes polyols, polyglycols, glycerols, carbohydrates, starches, mono, di-, and polysaccharides used as lubricants, prepolymers, and intermediates in the manufacture of drugs and many industrial products.

IR - Solvents - Bio-Rad Sadtler

Product Code 432700 **910 Spectra**

This database provides a convenient, practical reference that aids in identification and analysis of common industrial solvents. The solvents are classified into four main groups: hydrocarbons, compounds having only one type of characteristic atom or functional group, compounds having more than one type of characteristic atom or functional group, and deuterated compounds.

IR - Surfactants (Basic) - Bio-Rad Sadtler

Product Code 436700 **850 Spectra**

This collection provides scientists working with surface active agents a reference database of representative compounds. Contains FT-IR spectra of anionic, cationic, and nonionic compounds.

IR - Surfactants (Comprehensive) - Bio-Rad Sadtler

Product Code 323500 **10,000 Spectra**

The largest commercially available collection of infrared spectra of detergents, emulsifiers, defoamers, softeners, sequestering agents, soaps, builders, and formulating products.

IR - Surfactants (Subset) 1 - Bio-Rad Sadtler

Product Code 423500 **1,790 Spectra**

Collection of IR spectra selected to assist in solving analytical problems in the area of surfactant analysis. Analytical applications include identification, quality control, decomposition studies, product selection, *in-situ* study of their particular utility, plus other uses such as academic instruction. The collection consists of commercially available products such as soaps, emulsifiers, chelating agents, corrosion inhibitors, slip agents, thickening agents, optical bleaches, lubricants, defoamers, sequestering agents, softeners, etc.

IR - Surfactants (Subset) 2 - Bio-Rad Sadtler

Product Code 425200 **1,700 Spectra**

This collection of IR spectra selected to assist in solving analytical problems in the area of surfactant analysis. These products are utilized as detergents, soaps, emulsifiers, chelating agents, corrosion inhibitors, slip agents, thickening agents, optical bleaches, lubricants, etc.

IR - Surfactants, Hummel - Wiley

Product Code 465700 **1,030 Spectra**

This database contains spectra of surfactants compiled by Professor Dieter O. Hummel. In order to present a comprehensive database of compounds for those using surfactants, research samples and industrial surfactants were used to create the data.

IR Databases: Forensic Sciences

Contains Structures

IR - Automobile Paint Chips

Product Code 460300 **1,990 Spectra**

This collection is intended primarily for use in making color comparisons and/or chemical comparisons. All the color chips in the database were prepared from actual production paint batches. Paint types included are acrylic solution lacquer, acrylic dispersion lacquer, acrylic enamel, polyester enamel, urethane enamel, base coat/clear coat acrylic enamel, non-aqueous dispersion enamel (NAD), water-based enamel, etc.

IR - Biochemicals - Bio-Rad Sadtler

Product Code 447200 **590 Spectra**

This database contains infrared spectra of a variety of biochemicals such as peptides, amino acids, carbohydrates, nucleic acids, sugars, lipids, steroids, terpenes, alkaloids, glycosides, carotenoids, flavonoids, etc.

IR - Canadian Forensics

Product Code 421200 **3,490 Spectra**

This database contains spectra of legal and illegal drugs, drug precursors, and the reagents used to prepare them, as well as other substances encountered in forensic analysis. Some common laboratory and household reagents have been included as well. This database was produced by the Department of National Health and Welfare of the Government of Canada.

IR - Commonly Abused Drugs (Acid) - Bio-Rad Sadtler & IR - Commonly Abused Drugs (Base) - Bio-Rad Sadtler

Product Code 421400 **580 Spectra**

This collection contains spectral data on drugs which are frequently misused. The compounds represented are predominately brand name drugs in dosage form with some drugs in bulk supply form and some narcotics. Some mixtures in this collection are street drugs, that is, mixtures of narcotics that have been unlawfully prepared.

IR - Dyes - Bio-Rad Sadtler

Product Code 421600 **520 Spectra**

This collection of dyes provides a convenient and practical reference source of information for chemists and technologists in the dye or color industry. Dyes are grouped into classes based on usage established by the Colour Index (C.I.).

IR - Dyes, Pigments & Stains - Bio-Rad Sadtler

Product Code 431600 **2,550 Spectra**

This collection of dyes, pigments, and stains provides a convenient and practical reference source of information for chemists and technologists in the dye industry.

IR - Explosive Materials - Bio-Rad Sadtler

Product Code 438800 **720 Spectra**

This database contains compounds that may be considered explosive or components of explosives. It includes compounds mentioned in the “2002 List of Explosive Materials” produced by the Bureau of Alcohol, Tobacco, and Firearms. It also includes azide explosives, nitrate explosive mixtures, picrate explosives, peroxides, and perchlorates.

IR - Fibers & Textile Chemicals - Bio-Rad Sadtler

Product Code 420300 **480 Spectra**

Collection contains natural and synthetic fibers from domestic and foreign sources. Among the natural fibers represented are: silk, wool, cotton, kapok, flax, jute, hemp, sisal, raffia, and asbestos. Synthetic fibers include all generic classifications defined in the Textile Fiber Products Identification Act (with the exception of metallic class). Classes include acetate, acrylic, nylon, nytril, polyester, rayon, triacetate, vinyl, and vinylon. Textile chemicals include defoamers, detergents, bleaches, antistats, conditioners, finishers, softeners, and other agents.

IR - Fibers by Microscope - Bio-Rad Sadtler

Product Code 436400 **450 Spectra**

This database contains high-quality reference spectra of commercially available synthetic fibers measured by FT-IR instrument and microscope. The spectra were measured on fiber and yarn samples, and multiple spectra are provided for two or more components in a yarn.

IR - Flavors & Fragrances (Vapor Phase) - Bio-Rad Sadtler

Product Code 447400 **490 Spectra**

IR database with vapor phase spectra of pure organic compounds used in the manufacture of flavors, fragrances, and synthesized compounds.

IR - Flavors, Fragrances & Oils - Bio-Rad Sadtler

Product Code 436500 **870 Spectra**

This database provides scientists with a representative collection of organic compounds used in the manufacture of flavors and fragrances, natural product oils, synthesized fragrance compounds, terpenes, and some fixatives. The database includes infrared spectra of compounds that are approved by the Flavor and Extracts Manufacturers' Association of the United States.

IR - Food Additives (Revised) - Bio-Rad Sadtler

Product Code 467100 **990 Spectra**

IR database with spectra of ingredients added directly to food that FDA has either approved as food additives or listed or affirmed as GRAS.

IR - Georgia State Crime Lab

Product Code 460400 **1,910 Spectra**

Collection of infrared reference spectra of controlled substances as well as compounds likely to be encountered in routine and instrumental analysis of drugs. Prepared at the Division of Forensic Sciences, Georgia State Crime Laboratory, Atlanta, Georgia.

IR - Pharmaceutical Excipients - Bio-Rad Sadtler

Product Code 447100 **880 Spectra**

This database was prepared for those studying pharmaceutical formulations using infrared spectroscopy and it contains spectra of materials used in the development, production, control and regulation of pharmaceutical preparations. These compounds may be classified as binders, fillers, diluents, flow enhancers, sweetners, coatings, preservatives, dispersing agents, flavors, suspensing agents, compression aids, etc.

IR - Pharmaceuticals - Bio-Rad Sadtler

Product Code 443100 **560 Spectra**

Comprehensive collection of drugs, medicinals, and pharmaceutical preparations frequently encountered in medical and pharmaceutical research and drug analysis. Compounds have been selected from: *Modern Drug Encyclopedia, The U.S. Pharmacopoeia, The British Pharmacopoeia, The International Pharmacopoeia, New and Non-Official Drugs*, and *The National Formulary*. The classes include anesthetics, antimicrobials, antibiotics, anticoagulants, antivirals, cardiovascular agents, diuretics, enzymes, estrogens, hormones, relaxants, sedatives, stimulants, tranquilizers, and vitamins.

IR - Prepared & Prescription Drugs (Acid) - Bio-Rad Sadtler & IR - Prepared & Prescription Drugs (Base) - Bio-Rad Sadtler

Product Code 445700 **880 Spectra**

This collection contains the spectra of trade name prepared and prescription drugs selected from the *Physician's Desk Reference to Pharmaceutical Specialties and Biologicals* to provide a rapid method of characterizing drugs.

IR - Steroids 1 - Bio-Rad Sadtler

Product Code 439600 **860 Spectra**

This database contains FT-IR spectra representing important classes of compounds for steroid research.

IR - Steroids 2 - Bio-Rad Sadtler

Product Code 420900 **240 Spectra**

This database contains FT-IR spectra representing important classes of compounds for steroid research.

IR - Steroids, Androgens, Progestins, & Estrogens - Bio-Rad Sadtler

Product Code 447700 **300 Spectra**

The database, prepared by Forensic Spectral Research, contains steroids, androgens, progestins, and estrogens useful in forensic, pharmaceutical, medical, and other applications.

IR Databases: Environmental Applications

Contains Structures

IR - HAZMAT (Hazardous Materials) - Bio-Rad Sadtler

Product Code 438900 **410 Spectra**

Database contains infrared spectra of hazardous compounds. This collection of selected substances can be used for identification, classification, and verification of these materials.

IR - Pesticides & Agricultural Chemicals - Bio-Rad Sadtler

Product Code 436600 **1,020 Spectra**

Comprehensive selection of chemical materials used in all phases of agriculture. Materials in this database may also be considered industrial wastes. These compounds, most of which are pesticides, come from a variety of sources. All of the chemicals are commercially available, but this database also contains high-purity pesticide reference standards supplied to Bio-Rad by the U.S. Environmental Protection Agency. In most cases, the compounds represent the active ingredient of commercial formulations, although some complete formulations have also been included. Includes: acaricides, bactericides, nematicides, growth regulators, hormones, preservatives, nutrients, fungicides, herbicides, insecticides, repellents and attractants, miticides, rodenticides, and other agricultural chemicals.

Spectral Databases

IR - Pollutants (Vapor Phase) - Bio-Rad Sadtler

Product Code 447300 **900 Spectra**

This database provides a spectral reference for those who analyze, monitor, control, or study environmental, physiological, or occupational pollutants and toxic substances. It contains vapor phase spectra that are representative of those one would obtain using GC/FT-IR analysis where the spectra are measured above ambient temperature in a heated optical cell.

IR - Priority Pollutants - Bio-Rad Sadtler &
IR - Priority Pollutants (Vapor Phase) - Bio-Rad Sadtler

Product Code 447000 **470 Spectra**

This database is a convenient and practical spectral reference for research, industry, and all others who are engaged in analyzing, monitoring, controlling, or studying environmental, physiological, or occupational pollutants and toxic substances. These compounds have appeared in the “EPA Priority Pollutants List,” the “Occupational Safety and Health Administration (OSHA) Category 1 List of Carcinogenic Substances,” and a list of hazardous compounds common to industry and of concern during interstate transportation and appear on the “EPA Priority Pollutant List.” The database includes compounds that are represented by two types of spectra, infrared condensed phase and infrared vapor phase.

IR - EPA Vapor Phase - Bio-Rad Sadtler

Product Code 461000 **3,230 Spectra**

The purpose of this database is to provide reference spectra pertinent to pollution and toxicological identification and contracted for this database. It includes IR vapor phase spectra of common pure organic compounds and is helpful in identifying unknown compounds by GC-IR, TGA-IR, or other vapor phase methods of analysis.

IR - Water Treatment Chemicals - Bio-Rad Sadtler

Product Code 421000 **290 Spectra**

Collection of infrared spectra of commercially available materials used in water treatment processes, such as boiler water additives and cooling water additives. Includes biocides, chelating agents, coagulants, and flocculating agents.

IR Databases: Inorganics & Organometallics

Contains Structures

IR - Inorganics - Bio-Rad Sadtler

Product Code 435900 **1,100 Spectra**

IR database with spectra of inorganic compounds. The spectra are representative of many anions and polyatomic ions common to inorganic materials and are classified according to anion or polyatomic ion following groups in the periodic chart. This collection contains the spectra of "classical" inorganic compounds such as ammonium sulfate, ammonium nitrate, zirconium sulfate, and coordination compounds of various metals with inorganic and organic ligands. The classes represented in this collection include inorganic compounds, inorganic coordination compounds, organic coordination compounds, metal carbonyl compounds, and boranes.

IR - Inorganics (Subset) - Bio-Rad Sadtler

Product Code 445900 **240 Spectra**

IR database of inorganic compounds. The spectra are representative of many anions and polyatomic ions common to inorganic materials and are classified according to anion or polyatomic ion following groups in the periodic chart.

IR - Minerals & Clays - Bio-Rad Sadtler

Product Code 420600 **420 Spectra**

IR database with spectra of minerals and clays. The spectra are classified according to an increasing order of complexity of the mineral.

IR - Organometallics - Bio-Rad Sadtler

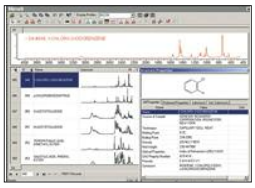
Product Code 420700 **340 Spectra**

IR database compiled specifically for scientists interested in organometallic chemistry. Samples have been solicited from industrial concerns and academic and research institutions in an attempt to select a cross section of compounds of interest. This database is comprised of spectra of compounds which possess a direct carbon-to-metal bond and compounds in which the metal atom is bonded to carbon by a single hetero atom.

IR Databases: HaveItAll

HaveItAll IR (Annual License)

Product Code 891000 **225,000 Spectra**



Infrared spectral collection of over 225,000 spectra of pure organic and commercial compounds. This database is extremely useful when trying to identify or classify unknown spectra. Whether the need is to access polymers, pure organics, inorganics, organometallics, or industrial compounds within application areas such as pharmaceuticals, forensics, material sciences, and academia, users can be sure that this collection will meet their needs. Search by spectra, peak, name, structure, substructure, and property fields, such as technique, molecular weight, CAS Registry Number, etc.

1. ATR-IR - Controlled & Prescription Drugs 1 - Bio-Rad Sadtler ⬡
2. ATR-IR - Controlled & Prescription Drugs 2 - Bio-Rad Sadtler ⬡
3. ATR-IR - Inorganics 1 - Bio-Rad Sadtler ⬡
4. ATR-IR - Inorganics 2 - Bio-Rad Sadtler ⬡
5. ATR-IR - NIOSH Pocket Guide to Chemical Hazards Compounds - Bio-Rad Sadtler ⬡
6. ATR-IR - Nutraceuticals - Bio-Rad Sadtler ⬡
7. ATR-IR - Organometallics 1 - Bio-Rad Sadtler ⬡
8. ATR-IR - Organometallics 2 - Bio-Rad Sadtler ⬡
9. ATR-IR - Plasticizers - Bio-Rad Sadtler ⬡
10. ATR-IR - Polymers - Bio-Rad Sadtler
11. ATR-IR - Polymers & Monomers (Basic) 1 - Bio-Rad Sadtler ⬡
12. ATR-IR - Polymers & Monomers (Basic) 2 - Bio-Rad Sadtler ⬡
13. ATR-IR - Solvents - Bio-Rad Sadtler ⬡
14. IR - Adhesives & Sealants - Bio-Rad Sadtler
15. IR - Adhesives & Sealants (Subset) - Bio-Rad Sadtler
16. IR - Automobile Paint Chips
17. IR - Coating Chemicals - Bio-Rad Sadtler
18. IR - Coating Chemicals (Revised) - Bio-Rad Sadtler
19. IR - Commonly Abused Drugs (Acid) - Bio-Rad Sadtler/IR - Commonly Abused Drugs (Base) - Bio-Rad Sadtler
20. IR - Controlled & Prescription Drugs 1 - Bio-Rad Sadtler ⬡
21. IR - Dyes - Bio-Rad Sadtler ⬡
22. IR - Dyes, Pigments & Stains - Bio-Rad Sadtler
23. IR - Electric Power Plant Materials - Bio-Rad Sadtler
24. IR - EPA Vapor Phase - Bio-Rad Sadtler ⬡
25. IR - Epoxy Resins, Curing Agents & Additives - Bio-Rad Sadtler
26. IR - Fats, Waxes & Derivatives - Bio-Rad Sadtler
27. IR - Fibers & Textile Chemicals - Bio-Rad Sadtler
28. IR - Fibers by Microscope - Bio-Rad Sadtler
29. IR - Flame Retardants - Bio-Rad Sadtler
30. IR - Flavors, Fragrances & Oils - Bio-Rad Sadtler ⬡
31. IR - Food Additives - Bio-Rad Sadtler
32. IR - Food Additives (Revised) - Bio-Rad Sadtler ⬡
33. IR - Gases & Vapors - Bio-Rad Sadtler ⬡
34. IR - Georgia State Crime Lab ⬡
35. IR - Industrial Chemicals, Basic Organic Compounds - Wiley ⬡
36. IR - Industrial Chemicals, Pure Organic Compounds - Wiley ⬡
37. IR - Inorganics - Bio-Rad Sadtler
38. IR - Inorganics (Subset) - Bio-Rad Sadtler
39. IR - Intermediates - Bio-Rad Sadtler
40. IR - Intermediates (Basic) - Bio-Rad Sadtler ⬡
41. IR - Lubricant Additives 1 - Bio-Rad Sadtler/IR - Lubricant Additives 2 - Bio-Rad Sadtler
42. IR - Lubricants 1 - Bio-Rad Sadtler
43. IR - Lubricants 2 - Bio-Rad Sadtler
44. IR - Merck - Bio-Rad Sadtler ⬡
45. IR - Minerals & Clays - Bio-Rad Sadtler
46. IR - NIOSH Pocket Guide to Chemical Hazards Compounds - (Vapor Phase) - Bio-Rad Sadtler ⬡
47. IR - NIOSH Pocket Guide to Chemical Hazards Compounds - Bio-Rad Sadtler ⬡
48. IR - Organometallics - Bio-Rad Sadtler ⬡
49. IR - Organosilicons
50. IR - Pesticides & Agricultural Chemicals - Bio-Rad Sadtler ⬡
51. IR - Petroleum Chemicals - Bio-Rad Sadtler
52. IR - Pharmaceuticals - Bio-Rad Sadtler
53. IR - Plasticizers - Bio-Rad Sadtler
54. IR - Polymer Additives - Bio-Rad Sadtler
55. IR - Polymer Additives (Revised) - Bio-Rad Sadtler
56. IR - Polymer Additives, Hummel Industrial - Wiley ⬡
57. IR - Polymer Processing Chemicals - Bio-Rad Sadtler Scholl ⬡
58. IR - Polymers & Monomers (Basic) 1 - Bio-Rad Sadtler ⬡
59. IR - Polymers & Monomers (Basic) 2 - Bio-Rad Sadtler ⬡
60. IR - Polymers & Monomers (Basic) 3 - Bio-Rad Sadtler ⬡
61. IR - Polymers & Monomers (Comprehensive) - Bio-Rad Sadtler
62. IR - Polymers & Monomers (Subset) 1 - Bio-Rad Sadtler
63. IR - Polymers & Monomers (Subset) 2 - Bio-Rad Sadtler
64. IR - Polymers, Controlled Pyrolyzates - Bio-Rad Sadtler
65. IR - Polymers, Hummel - Bio-Rad Sadtler ⬡
66. IR - Polymers, Hummel Defined - Wiley ⬡
67. IR - Polymers, Hummel Defined Basic - Wiley ⬡
68. IR - Polymers, Hummel Industrial - Wiley ⬡
69. IR - Polymers, Hummel Industrial Monomers - Wiley ⬡
70. IR - Polymers, Hummel Industrial Polymers - Wiley ⬡
71. IR - Polyols - Bio-Rad Sadtler
72. IR - Prepared & Prescription Drugs (Acid) - Bio-Rad Sadtler/IR - Prepared & Prescription Drugs (Base) - Bio-Rad Sadtler
73. IR - Priority Pollutants - Bio-Rad Sadtler/IR - Priority Pollutants (Vapor Phase) - Bio-Rad Sadtler ⬡
74. IR - Rubber Chemicals - Bio-Rad Sadtler
75. IR - Rubber Chemicals (Revised) - Bio-Rad Sadtler
76. IR - Solvents - Bio-Rad Sadtler
77. IR - Solvents (Basic) - Bio-Rad Sadtler ⬡
78. IR - Solvents (Vapor Phase) - Bio-Rad Sadtler ⬡
79. IR - Standards (Comprehensive) - Bio-Rad Sadtler ⬡
80. IR - Standards (Selected Subset) - Bio-Rad Sadtler ⬡
81. IR - Standards (Subset) 1 - Bio-Rad Sadtler ⬡
82. IR - Standards (Subset) 2 - Bio-Rad Sadtler ⬡
83. IR - Standards (Vapor Phase Comprehensive) - Bio-Rad Sadtler ⬡
84. IR - Standards (Vapor Phase Selected Subset) - Bio-Rad Sadtler ⬡
85. IR - Steroids 2 - Bio-Rad Sadtler ⬡
86. IR - Steroids, Androgens, Progestins, & Estrogens - Bio-Rad Sadtler ⬡
87. IR - Surfactants (Basic) - Bio-Rad Sadtler
88. IR - Surfactants (Comprehensive) - Bio-Rad Sadtler
89. IR - Surfactants (Subset) 1 - Bio-Rad Sadtler
90. IR - Surfactants (Subset) 2 - Bio-Rad Sadtler
91. IR - Surfactants, Hummel - Wiley
92. IR - University Standards - Bio-Rad Sadtler ⬡
93. IR - Water Treatment Chemicals - Bio-Rad Sadtler
94. NIR - Common Organic Compounds (High) - Wiley ⬡
95. NIR - Common Organic Compounds (Low) - Wiley ⬡

⬡ Contains structures

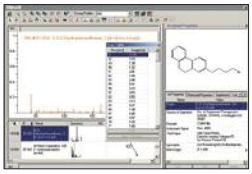
Spectral Databases

MS Databases

Contains Structures

HaveItAll MS (Annual License)

Product Code 893000 **199,000 Spectra**



This collection of spectra and related information includes data from the National Institute of Standards and Technology (NIST) with the assistance of expert advisors from the Environmental Protection Agency (EPA) and National Institutes of Health (NIH). Search by peak, name, structure, substructure, and property fields, such as technique, molecular weight, CAS Registry Number, etc. Database also includes chemical synonyms.

- MS - Bio-Rad Sadtler NIOSH Pocket Guide
- MS - NIST EPA NIH Mass Spectral Library
- MS - Bio-Rad Sadtler AAFS Toxicology Section of Drugs
- MS - Wiley Industrial Compounds
- MS - Wiley Volatile Compounds in Food
- MS - Wiley Geochemicals/Petrochemicals & Biomarkers
- MS - Wiley Androstanes & Estrogens and Other Steroids
- MS - Wiley Drugs

Near IR Databases

Contains Structures

NIR - Common Organic Compounds (High) – Wiley/ NIR - Common Organic Compounds (Low) - Wiley

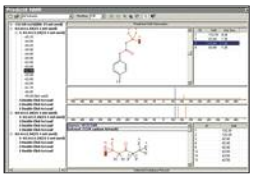
Product Code 466000 **3,800 Spectra**

This collection contains spectra of common organic compounds analyzed using the near infrared technique. There are two spectra provided covering two spectral regions, one higher and one lower, per structure.

NMR Databases

HaveItAll NMR (Annual License)

Product Code 892000 **567,000 Spectra**



Access over 500,000 ^{13}C NMR and over 66,000 ^{1}H NMR reference spectra for reliable NMR predictions. Within KnowItAll's PredictIt NMR, not only can one retrieve the spectral data used to 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.

- ^{13}CNMR Bio-Rad Sadtler
- ^{13}CNMR Wolfgang Robien
- ^{13}CNMR Organic Compounds - Wiley
- ^{13}CNMR Flavors & Fragrances - Wiley
- ^{13}CNMR Natural Products - Wiley
- ^{13}CNMR AIST SDBS
- ^{13}CNMR NIOSH Pocket Guide to Chemical Hazards Compounds - Bio-Rad Sadtler
- ^{13}CNMR Polymers & Monomers - Bio-Rad Sadtler
- ^{1}HNMR Bio-Rad Sadtler
- ^{1}HNMR NIOSH Pocket Guide to Chemical Hazards Compounds - Bio-Rad Sadtler
- ^{1}HNMR Chemical Shifts - Bio-Rad Sadtler
- ^{1}HNMR Organic Compounds 1 - Wiley
- ^{1}HNMR AIST SDBS
- ^{1}HNMR AIST SDBS (300 MHz)
- ^{1}HNMR AIST SDBS (400 MHz)

NMR - Metabolites - Bio-Rad Sadtler

Product Code 878600 **1,050 Spectra**

A collection of ^{1}H and ^{13}C NMR spectra of metabolites for identifying potential biomarkers of metabolomics experiments. Data is available from the Biological Magnetic Resonance (BMRB) laboratory at the University of Wisconsin, Madison. Includes links to PubChem, KEGG, and ChEBI databases, as well as KEGG pathway displays.

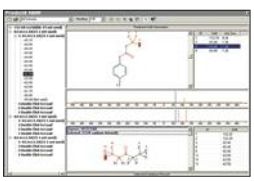
^{13}CNMR - Polymers & Monomers - Bio-Rad Sadtler

Product Code 872300 **740 Spectra**

Bio-Rad offers a database that can be used by polymer chemists and spectroscopists who study monomers, polymers, and resins using the ^{13}CNMR technique. Numerous polymer and monomer classifications are represented.

HaveItAll XNMR (Annual License)

Product Code 896000 **91,000 Spectra**



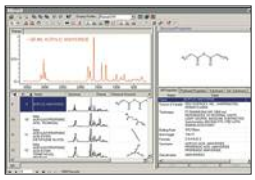
Access over 90,000 reference XNMR spectra for reliable predictions. It includes ^{19}F NMR, ^{31}P NMR, ^{15}N NMR, ^{11}B NMR, ^{17}O NMR, ^{29}Si NMR, and other nuclei. Within KnowItAll's PredictIt NMR, not only can one retrieve the spectral data used to build predictions, but can also access all of the available information related to the reference spectrum, such as sample source, solvent, conditions of production, equipment, and properties for the molecule.

- ^{11}B-NMR - Wolfgang Robien
- ^{19}F-NMR - Wolfgang Robien
- ^{15}N-NMR - Wolfgang Robien
- ^{17}O-NMR - Wolfgang Robien
- ^{31}P-NMR - Wolfgang Robien
- ^{29}Si-NMR - Wolfgang Robien
- ^{19}F-NMR - Wiley
- ^{15}N-NMR - Wiley
- ^{17}O-NMR - Wiley
- ^{31}P-NMR - Wiley
- ^{29}Si-NMR - Wiley

Raman Databases

HaveItAll Raman (Annual License)

Product Code 894000 **6,225 Spectra**



High-quality Raman data that focuses on monomers, polymers, organic, and inorganic compounds. Users can import their own spectra and search against a reference database containing 6,225 spectra. Search by spectra, peak, name, structure, substructure, and property fields, such as technique, molecular weight, CAS Registry Number, etc.

- Raman - Controlled & Prescription Drugs - Bio-Rad Sadtler
- Raman - Inorganics - Bio-Rad Sadtler
- Raman - JASCO
- Raman - Polymers & Monomers (Basic) - Bio-Rad Sadtler
- Raman - Polymers & Processing Chemicals - Sadtler
- Raman - Biomaterials - HORIBA
- Raman - Forensic - HORIBA
- Raman - Minerals - HORIBA
- Raman - Minerals (FT) - HORIBA
- Raman - Semiconductor Materials - HORIBA

Raman - Controlled & Prescription Drugs - Bio-Rad Sadtler

Product Code 470500 ***Coming Soon***

This database contains controlled and prescription drugs as well as steroids that may be of interest to forensic laboratories or any researcher analyzing drug samples.

Raman - Polymers & Monomers (Basic) - Bio-Rad Sadtler

Product Code 470100 **1,680 Spectra**

This database provides scientists with a central source of reliable polymeric data. Monomer and polymer compounds included in this collection were selected to provide simple compounds of representative functional groups for identification and classification. The database contains reference spectra, which have not been modified with any additives, although they may be copolymers or terpolymers.

Raman - Inorganics - Bio-Rad Sadtler

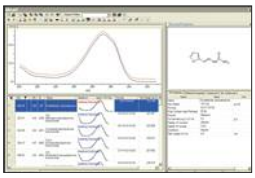
Product Code 470200 **1,630 Spectra**

Inorganic compounds included in this collection were selected to provide representative materials for identification and classification. The analytical applications of this database include identification, quality control, deterioration studies, materials selection, elucidation of molecular structure, plus other applications such as process control.

UV-Vis Databases

HaveItAll UV-Vis (Annual License)

Product Code 876300 **31,000 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.

- UV-Vis - Sadtler 200 to 350 nm - Bio-Rad Sadtler - 21,662 spectra
- UV-Vis - Sadtler 200 to 500 nm - Bio-Rad Sadtler - 7,055 spectra
- UV-Vis - Sadtler 200 to 800 nm - Bio-Rad Sadtler - 2,006 spectra

KnowItAll® Informatics System

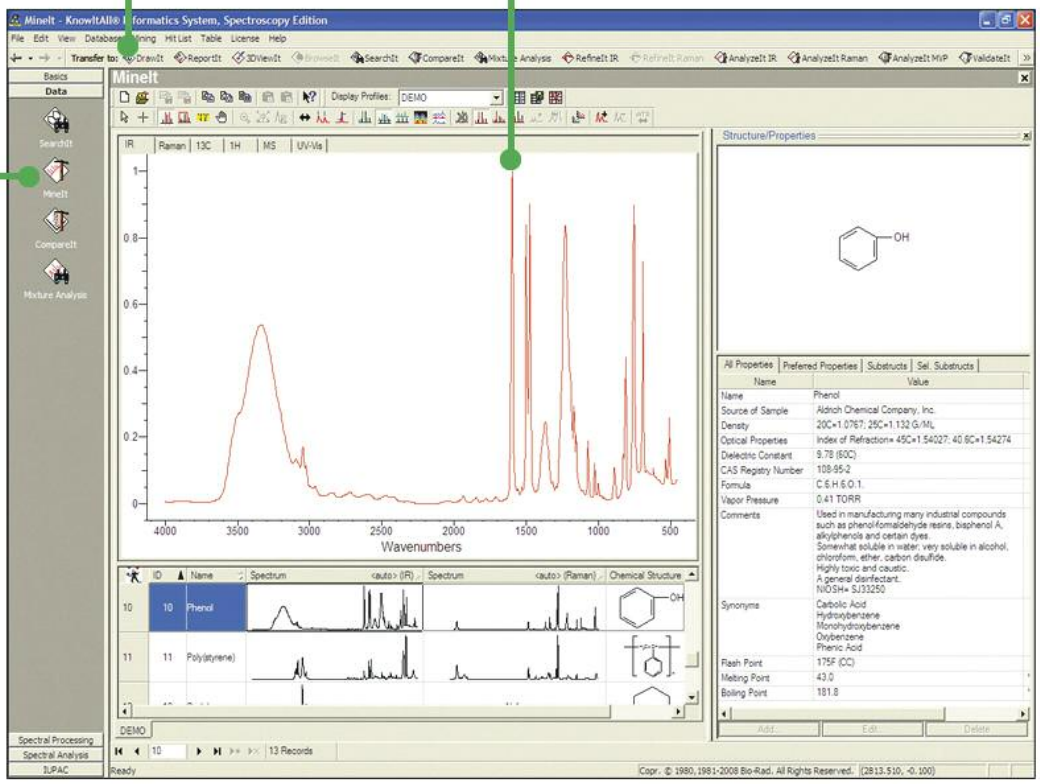
Bio-Rad's award-winning KnowItAll Informatics System offers fully integrated software solutions that provide multiple tools for spectroscopy—all within a single user interface—including:

- **Spectral Processing, Search, Analysis, & Prediction**
- **Result Reporting**
- **Database Building & Management**
- **Chemometrics Tools**
- **Chemical Structure Incorporation**

True Integration.
Instantly transfer data from one application to another.

Integrated Informatics.
Search, manage, and analyze spectroscopic and chemical information.

Versatile Toolboxes.
Evaluate spectra with suite of software tools.



Desktop & Enterprise Solutions.

How the KnowItAll Interface Works

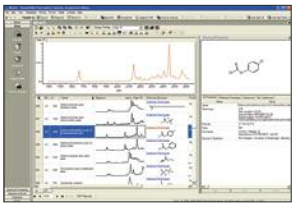
The KnowItAll interface is designed so the user can transfer information from one tool to another, and move from one task to the next, without having to leave the main interface or open another program. Multiple tasks are performed using logically grouped "toolboxes." Because all the tools are located in a single, integrated environment, using this system will invariably save time and improve workflow. Ultimately, by combining tools and data into one system, the end result is greater ability to extract knowledge from data.

KnowItAll Software Editions

Bio-Rad offers the following specialized "editions" of its KnowItAll system for various spectroscopic techniques. *See "KnowItAll Edition Feature Comparison Chart" on page 20 for more details.*

KnowItAll IR/NIR Edition

Product Code 879100



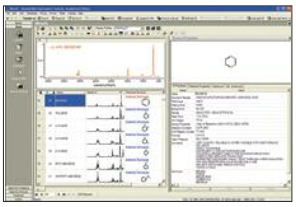
Techniques: IR, NIR

The KnowItAll IR/NIR Edition offers a fully integrated software environment for IR and NIR with data management *(optional)*, spectral search, processing, structure drawing, and reporting tools. Now with unique tools for analysis such as Overlap Density Heatmaps and Spectral Mixture Analysis.

Visit www.knowitall.com/iredition

KnowItAll Spectroscopy Edition

Product Code 876400



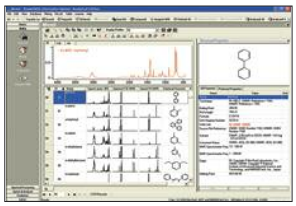
Techniques: IR, Raman, NIR, MS, UV-Vis, Chromatography

The KnowItAll Spectroscopy Edition offers a fully integrated software environment for IR, Raman, NIR, MS, UV-Vis, and chromatography that includes data management, spectral searching, processing, structure drawing, and reporting tools. Now with unique tools for analysis: Overlap Density Heatmaps and Spectral Mixture Analysis.

Visit www.knowitall.com/spectroscopyedition

KnowItAll Analytical Edition

Product Code 890200



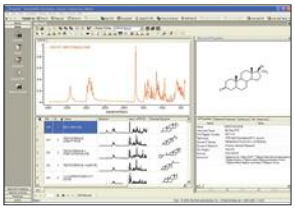
Techniques: IR, Raman, NIR, NMR, MS, UV-Vis, Chromatography

The KnowItAll Analytical Edition offers the first, fully integrated software environment for analytical techniques, including IR, Raman, NIR, NMR, MS, UV-Vis, and chromatography that includes multi-technique database management, spectral search, processing, structure drawing, and reporting tools. Now with unique tools for analysis: Overlap Density Heatmaps and Spectral Mixture Analysis. Includes additional mass spec filters.

Visit www.knowitall.com/analyticaledition

KnowItAll Enterprise Edition

Product Code 879400



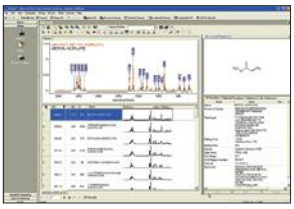
Techniques: IR, Raman, NIR, NMR, MS, UV-Vis, Chromatography

The award-winning KnowItAll Enterprise Edition offers the first, fully integrated software environment for analytical techniques, including IR, Raman, NIR, NMR, MS, UV-Vis, and chromatography that includes multi-technique database management (optional), spectral search, processing, structure drawing, and reporting tools. Now with unique tools for analysis: Overlap Density Heatmaps and Spectral Mixture Analysis.

Visit www.knowitall.com/enterprise

KnowItAll Raman Edition

Product Code 890700



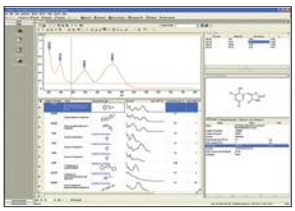
Technique: Raman

The KnowItAll Raman Edition offers a fully integrated software environment for Raman spectroscopy with data management *(optional)*, spectral searching, processing, structure drawing, and reporting tools. Now with unique tools for analysis such: Overlap Density Heatmaps and Spectral Mixture Analysis.

Visit www.knowitall.com/ramanedition

KnowItAll UV-Vis Edition

Product Code 876500



Technique: UV-Vis

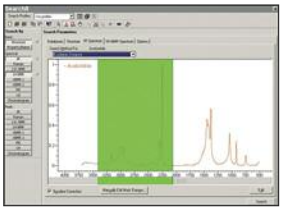
The KnowItAll UV-Vis Edition offers a fully integrated software environment for UV-Vis that includes data management, spectral searching, structure drawing, and reporting tools. Now with unique tools for analysis: Overlap Density Heatmaps and Spectral Mixture Analysis.

Visit www.knowitall.com/uv-visedition

KnowItAll Software Features

Included Applications & Features

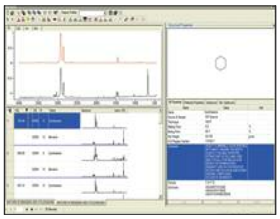
SearchIt™ - Database Searching *(full spectrum, structure, peak, property, etc.)*



The SearchIt application allows structures and/or spectra to be imported and searched against licensed reference databases, as well as against KnowItAll user-created databases. Searches are fully customizable and are driven by state-of-the-art algorithms. Searching can be performed by structure, substructure, name, properties, spectra, or any combination.

View demo movies at www.knowitall.com/searchit

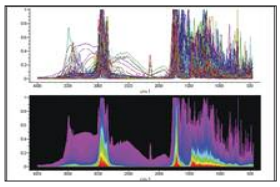
Spectral Mixture Analysis - Analyze Experimental Spectral Data of Mixtures



This application deconvolutes components of a mixture by analyzing a spectrum. It allows comparison of a sample spectrum against KnowItAll databases of a user's own proprietary spectra as well as any licensed KnowItAll reference databases. The result is a series of composite spectra, each accompanied by the individual component spectra that comprise the composite spectrum as well as the residual spectrum (the difference between the query spectrum of the actual mixture and the composite spectrum). The composite spectra are ranked by how closely they resemble the query spectrum.

View demo movies at www.knowitall.com/mixtureanalysis

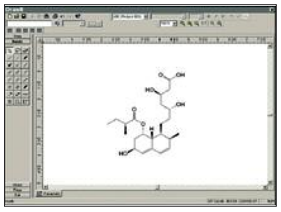
Overlap Density Heatmaps - Visual Data Mining and Analysis



Bio-Rad has introduced a breakthrough technology for visual data mining and analysis to assess the similarities and dissimilarities in massive amounts of spectral, chromatographic, or other graphical data.† This patented technology, called Overlap Density (OD) Heatmaps displays allows scientists to visualize the common features of the overlapped objects (such as spectra or chromatograms) by color coding.

View demo movies at www.knowitall.com/odhm

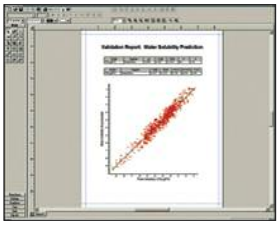
DrawIt™ (ChemWindow®) - 2D Structure Drawing *(includes stereochemical recognition)*



With DrawIt, users can draw any chemical structure with just a few clicks and drags. It has all the tools users need to draw rings, bonds, atoms, chains, arrows, and chemical symbols.

View demo movies at www.knowitall.com/drawit

ReportIt™ - Custom Publishing Tools



With ReportIt, users can create standard reports, presentations, and publications. Reports are easy to lay out by using one of our predefined or custom templates.

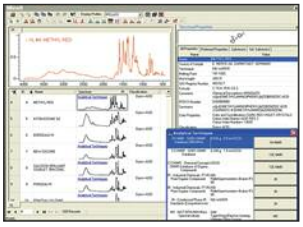
View demo movies at www.knowitall.com/reportit

† Formats supported will depend on the edition of KnowItAll that you choose.

Optional Applications & Features

Database Building Option - Build Databases with Spectra, Structures, & Properties

Product Code 850100



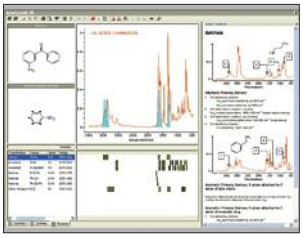
Chemists and spectroscopists produce valuable data every day within their organizations. With KnowItAll's MineIt Database Building option, researchers can capture these resources and build searchable databases that include multiple analytical techniques† (IR, Raman, NIR, NMR, MS, UV-Vis, chromatography), chemical structures, and alphanumeric data.

View demo movies at www.knowitall.com/databasebuilding

(Included in Spectroscopy, Analytical, Enterprise, and UV-Vis but optional in other KnowItAll editions)

AnalyzeIt™ IR - Functional Group Analysis

Product Code 851200

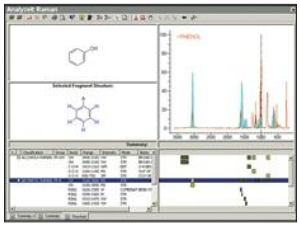


AnalyzeIt IR can be used to help interpret the bands in an infrared spectrum. Simply load a spectrum and click on a peak of interest to generate a list of all function groups possible at that position. AnalyzeIt also suggests the best peak to begin interpretation. It features over 200 function groups and hundreds of interpretation frequencies. The application also allows correlation from a structure. Now users can link to additional reference information for each functional group in the *Sadtler Handbook of Reference Spectra - IR*. Users can also build their own knowledgebase of functional groups that can be used in the interpretation.

View demo movies at www.knowitall.com/analyzeitir

AnalyzeIt Raman - Functional Group Analysis

Product Code 894200

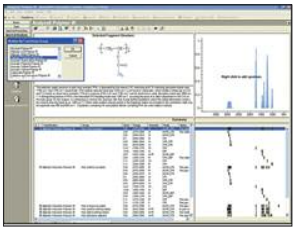


AnalyzeIt Raman can be used to help interpret the bands in a Raman spectrum. Simply load a spectrum and click on a peak of interest to generate a list of all functional groups possible at that position. AnalyzeIt also suggests the best peak to begin interpretation. It features over 200 functional groups and hundreds of interpretation frequencies. The application also allows correlation from a structure. Users can also build their own knowledgebase of functional groups that can be used in the interpretation.

View demo movies at www.knowitall.com/analyzeitraman

AnalyzeIt Polymer IR - Polymer Analysis

Product Code 854700

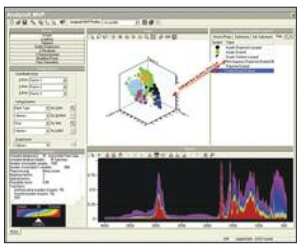


The identification, classification, and interpretation of commercial polymers is challenging. A key piece of desired information is the spectral-structure correlation information not available from spectral searching alone. AnalyzeIt Polymer IR—in tandem with a knowledge base of polymer spectral-structure correlations—is an application developed specifically to assist in this process. Users can also build their own knowledgebase of functional groups that can be used in the interpretation.

View demo movies at www.knowitall.com/analyzeitpolymerir

AnalyzeIt MVP - Multivariate Processing

Product Code 850800



AnalyzeIt MVP, which incorporates Infometrix' chemometrics technology for principal component analysis (from the well-known Pirouette® software) of spectroscopic, chromatographic, or numeric data,† enables a user to:

- Gain insight into hidden patterns and relationships in users' data
- Explore data correlations to answer critical research, development, or production questions
- Store results for subsequent reference, reporting, or investigation

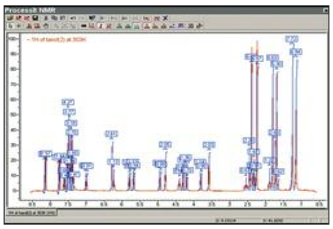
View demo movies at www.knowitall.com/analyzeitmvp

† Formats supported will depend on the edition of KnowItAll that you choose.

Optional Applications & Features

ProcessIt™ NMR - NMR Spectrum Processing

Product Code 892600



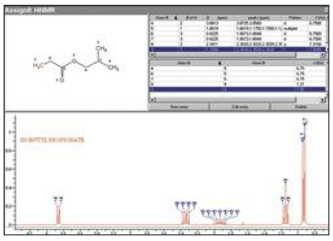
This feature allows users to import and process NMR signal or spectra from various formats. With this application, one can execute multiple-step processing either step-by-step or by using a macro capability to accomplish in batch mode.

View demo movies at www.knowitall.com/processitnmr

(Included in the Analytical and Enterprise editions)

AssignIt™ NMR - Add Assignments to NMR Databases

Product Code 892700

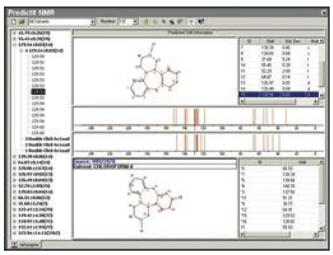


With this tool, add assignments and other information to structures in ^{1}H, ^{13}C, ^{19}F, ^{31}P, ^{15}N, ^{17}O, ^{11}B, and ^{29} Si KnowItAll NMR databases. AssignIt allows quick information input, such as peak shift assignments, intensities, coupling constants, multiplicities, and links to the relevant chemical structure or proposed structure.

View demo movies at www.knowitall.com/assignit

(Included in the Analytical and Enterprise editions)

PredictIt™ NMR - NMR Spectrum Prediction

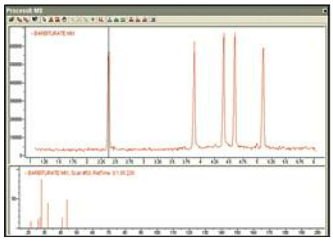


With the PredictIt NMR application, database-based NMR spectrum predictions can be performed for ^{13}C, ^{1}H, and many other nuclei. Predictions occur automatically when users open a structure in the application. To make predictions, KnowItAll examines any licensed databases of substructures that have ^{1}H, ^{13}C, or other shifts assigned to them. The substructures are defined by the number of shells that represent atoms within "n" bonds of the central atom.

View demo movies at www.knowitall.com/predictitnmr

(Included in the Analytical and Enterprise editions)

ProcessIt MS - MS & Hyphenated MS Processing



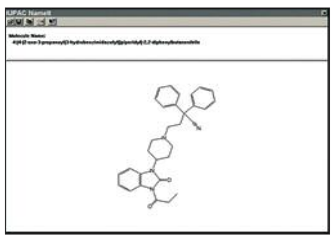
The ProcessIt MS application can be used to import and open GC/MS and LC/MS files and view and select MS scans within them. Selected MS scans can be added to user databases and can be searched. In addition, this application enables users to perform spectral averaging and subtraction and allows the display of selected ion chromatograms (SICs).

View demo movies at www.knowitall.com/processitms

(Included in the Spectroscopy, Analytical, and Enterprise editions)

IUPAC NameIt™ & DrawIt - Systematic IUPAC Names from Structures & Vice Versa

Product Code 854400



With KnowItAll's IUPAC NameIt and IUPAC DrawIt options, effortlessly name or create structures using systematic IUPAC rules. Simply enter a structure or a name, click a button, and generate the corresponding name or structure based on internationally accepted standard nomenclature rules—without having to memorize them. Generating names and structures this way not only saves time, but also ensures accuracy and standardization of communication and data mining within the laboratory.

View demo movies at www.knowitall.com/iupac

Optional Applications & Features

Infometrix' Pirouette® Software - Chemometrics Tools for Classification, Data Exploration, & More

Prediction, classification, data exploration and multivariate regression methods are implemented in this chemometrics software from Infometrix, which now includes mixture analysis. A simple to use, yet very powerful interface, facilitates interacting with raw and processed data. Support for many common instrument and data exchange file formats make importing data painless. Thousands of subsets can be created from a single data file, allowing the user to exercise many different "what-if" scenarios without having to collect additional data.

For more details, please visit www.knowitall.com/pirouette

KnowItAll Edition Feature Comparison Chart

● - Included in Edition O - Optional

Component	Description	IR/NIR Edition	Spec Edition	Analytical Edition	Enterprise Edition	Raman Edition	UV-Vis Edition
Data Toolbox							
SearchIt™	Database searching (full spectrum, structure, peak, property, etc.)	●	●	●	●	●	●
MineIt™	Database display and mining	●	●	●	●	●	●
Database Building	Build multi-technique† databases with spectra and structures; feature in MineIt	O	●	●	O	O	●
Overlap Density Heatmap	Patented technology for visual data mining and analysis	●	●	●	●	●	●
AssignIt™	Add assignments to NMR databases for ^{1}H, ^{13}C, and other nuclei			●	●		
Mixture Analysis	Analyze experimental spectral data of mixtures	●	●	●	●	●	●
Batch Property Calculation	Calculate properties for entire databases	●	●	●	●	O	●
Pirouette® Model Support	Use models built in Infometrix Pirouette software	●	●	●	●	●	●
Spectral Processing Toolbox							
RefineIt™ IR	IR spectrum processing	●	●	●	●		
RefineIt™ Raman	Raman spectrum processing		●	●	●	●	
ProcessIt™ NMR	NMR spectrum processing			●	●		
ProcessIt™ MS	MS and hyphenated MS processing		●	●	●		
Additional MS File Imports Filters			●	●	O		
Spectral Analysis Toolbox							
AnalyzeIt™ IR	IR spectrum/structure correlation	O	O	O	O		
AnalyzeIt™ Raman	Raman spectrum/structure correlation		O	O	O	O	
AnalyzeIt™ MVP	Multivariate processing for chemometrics and principle component analysis	O	O	O	O	O	O
ValidateIt™	Statistical model validation	●	●	●	●	O	●
AnalyzeIt™ Polymer IR	IR spectrum/structure correlation for polymers	O	O	O	O		
Prediction Toolbox							
PredictIt™ NMR	NMR chemical shift prediction			●	●		
Basics Toolbox							
DrawIt™	2D structure drawing	●	●	●	●	●	●
ReportIt™	Custom reports and publishing tools	●	●	●	●	●	●
3D ViewIt™	Visualization of 3D structures		●	●	●		●
BrowseIt™	Web portal with useful links for KnowItAll users	●	●	●	●	●	●
IUPAC Toolbox							
IUPAC DrawIt™	Convert IUPAC name to structure	O	O	O	O	O	O
IUPAC NameIt™	Convert structure to systematic IUPAC name	O	O	O	O	O	O
Other Options							
Spectral Databases	Choose from over 100 spectral databases or HaveItAll annual licenses	O	O	O	O	O	O
KnowItAll® Enterprise Server	Centralize spectral and chemical information	O	O	O	O	O	O
Infometrix Pirouette® Software	Additional chemometrics tools	O	O	O	O	O	O
Upgrade Plan	Support and upgrade plan for KnowItAll users	O	O	O	O	O	O

† Formats supported will depend on the edition of KnowItAll that you choose.

KnowItAll File Formats

KnowItAll helps scientists deal with multiple types of spectral/chemical data and multiple file and instrument formats. Formats supported depend on the edition of KnowItAll licensed.

IR

Sadtler IRF (*.irf)
Bomem (*.a01)
Bruker (*.*)
Digilab (*.dt)
Galactic/GRAMS (*.spc, *.fir, *.ir, *.rmn)
Horiba NGS/TSF files (*.ngs, *.tsf)
Generic XY Data (*.*)
Horiba MDW (*.mdw)
JASCO (*.jws, *.j1d)
JCAMP (*.dx, *.jdx)
JEOL (*.wsf)
Mattson (*.ras, *.abs)
Nicolet files (*.spa)
PE Spectrum (*.sp)
Shimadzu SMF (*.irs, *.smf)
Spectacle/Shimadzu files (*.irs, *.nmr, *.uvd)
RenishawWiREF files (*.wxd)

Raman

Sadtler IRF files (*.irf)
Bomem files (*.a01)
Bruker files (*.*)
Digilab files (*.dt)
Galactic/Grams files (*.spc, *.fir, *.ir, .rmn)
Generic XY Data (*.*)
Horiba MDW files (*.mdw)
Horiba NGS files (*.ngs)
JASCO files (*.jws, *.j1d)
JCAMP files (*.dx, *.jdx)
JEOL files (*.wsf)
Mattson files (*.ras, *.abs)
Nicolet files (*.spa)
PE Spectrum files (*.sp)
Renishaw WiREF files (*.wxd)
Shimadzu SMF files (*.irs, *.smf)
Spectacle/Shimadzu files (*.irs, *.nmr, *.uvd)

NIR

Sadtler IRF (*.irf)
Bomem (*.a01)
Bruker (*.*)
Digilab (*.dt)
Galactic/GRAMS (*.spc, *.fir, *.ir, *.rmn)
Generic XY Data (*.*)
GuidedWave (*.*)
Horiba NGS/TSF files (*.ngs, *.tsf)
Horiba MDW (*.mdw)
JASCO (*.jws, *.j1d)
JCAMP (*.dx, *.jdx)
Mattson (*.ras, *.abs)
Nicolet files (*.spa)
PE Spectrum (*.sp)
Spectacle/Shimadzu files (*.irs, *.nmr, *.uvd)
Shimadzu SMF (*.irs, *.smf)

NMR *(processed spectra only)*

Bruker Aspect (*.*)
Bruker UXNMR/XWinNMR 2D (*.2rr)
Bruker UXNMR/XWinNMR 1D (*.1r, *.fid)
Bruker WinNMR (*.1r, *.fid)
Galactic/Grams (*.spc, *.fir, *.ir, .rmn)
Generic XY Data (*.*)
JEOL AL NMR (*.als)
JEOL Delta NMR files (*.jdf)
JEOL GX/GSX/EX-90 NMR files (*.gxd, *.gxp)
JCAMP (*.dx, *.jdx)
MestRe-C files (*.mrc)
NUTS files (*.*)
Spectacle/Shimadzu files (*.irs, *.nmr, *.uvd)
Varian 1D NMR files (phasefile, data, fid)
Varian 2D NMR files (phasefile)

MS

Agilent / HP ChemStation (*.d; data.ms)
Agilent / HP ChemStation (NT) (*.msd, *.ms)
ANDI Mass Spec (*.cdf)
Anelva AGS-7000 (*.par)
Anelva AGS-7000 (DOS)(*.par)
Automass (*.spa)
Balzers QuadStar (*.scb)
EPA (*.ep)
Extrel Merlin (*.ms)
Finnigan GCQ (*.ms)
Finnigan Incos (*.mi)
Finnigan Ion Trap (*.dat)
Finnigan ITS-40 (*.ms)
Finnigan Magnum (*.ms)
Finnigan SSX (*.dat)
Galactic/Grams (*.spc, *.fir, *.ir)
Generic XY data (*.*)
Hitachi (*.mch)
Hitachi M-4100 (ms1.mat)
Hitachi MS Filer (*.msf)
HP RTE Chemstation (*.ms)
JEOL Compliment (*.hed)
JEOL DA-5000 (*.dat)
JEOL DA-6000(*.dat)
JEOL GCMate (*.lrp)
JEOL JCAMP (*.jsp)
JEOL Mario (*.hed)
JCAMP (*.dx, *.jdx)
Kratos DS90 (*.rn)
Kratos Mach3 (*.run)
MASPEC (*.mss)
Mass Evolution (*.spe)
Mass Evolution EZScan v4 (*.hrd)
MassLib JCAMP (*.mlj)
MatLab (*.mlt)
MSS (*.mss)
MS ChemStation (*.ms)
Nermag SIDAR (*.spe)
Netzsch (*.ntz)
netCDF (*.cdf)
Palisade PAL (*.pal)
PE TurboMass (*.raw;_func, *.dat)
PE QMass-910 (*.mss)
Shrader Systems/Windows (*.lrp)
Shrader System (*.lrp)
Shimadzu PAC200 (*.x)
Shimadzu QP-5000 (*.r)
Teknivent Vector/2 (*.tkf)
Teknivent Vector/1 (*.raw)
Teknivent Vector/2 (*.v2s)
Text (*.txt)
ThermoQuest Xcalibur (*.raw)
Varian Saturn (*.ms)
VG 11-250 (*.dat)
VG JCAMP (*.jdx)
VG LabBase (*.hdr)
VG MassLab (*.raw;_func, *.dat)
VG MassLynx (*.raw;_func, *.dat)
VG MassLynx Processed (*.raw;_func, *.dat)
VG ThermoLab (*.lgh)
VG ThermoLab (*.ps)

UV-Vis

Galactic/Grams (*.spc, *.fir, *.ir)
Generic XY Data (*.*)
JCAMP (*.dx, *.jdx)
JASCO (*.jws)
PG Instruments (*.spd)
Spectacle/Shimadzu files (*.irs, *.nmr, *.uvd)

GC

ANDI Chromatography (*.cdf)
Galactic/Grams (*.spc, *.fir, *.ir)
Generic XY Data (*.*)
MS ChemStation (*.ms)
Spectacle/Shimadzu files (*.irs, *.nmr, *.uvd)

Structure File Formats

ChemDraw (*.cdx)
ChemWindow (*.cwg)
ChemWindow template files (*.cwt)
CML structure files (*.XML)
DrawIt Structure files (*.dsf)
DrawIt Structure template & style files (*.dst)
Hampden Structure files (*.hsf)
InChI structure (*.txt)
JCAMP (*.dx, *.jdx)
MDL MOL files (*.mol)
MDL RXN files (*.rxn)
Smiles structure files (*.smi)
XYZ structure files (*.xyz)

Data File Formats

MDL SDF (*.sdf)
Infometrix (*.dat)

KnowItAll is also capable of importing XY data as well as spreadsheets: Generic X Y data files (*.*); text files delimited by comma, tab, etc. (*.csv)

KnowItAll Enterprise Solutions Overview

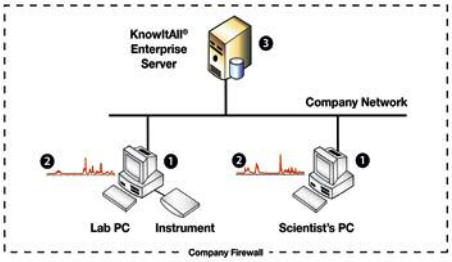
Maximize Productivity: Centralize Access to All Spectra & Chromatograms

Because our primary business is creating spectral databases, we have built our KnowItAll Enterprise Solutions through years of experience in doing just that—building databases. With KnowItAll, your organization can create a data warehouse using these very same technologies. Designated users can then access this data via a secure web browser behind your firewall and ultimately extract more knowledge from these continuously updated, shared resources. **For details visit www.knowitall.com/enterprise.**

Windows Client

Find Data with SpecFinder™

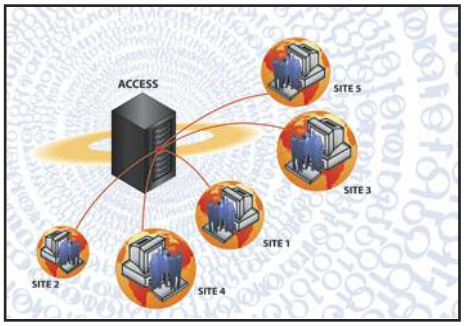
SpecFinder™ is an enterprise-wide tool that continually monitors all computers, servers, instrument systems, and workstations for analytical chemistry data, including spectra, chromatograms, peak tables, and chemical structure files. The data are then indexed and stored on the centralized KnowItAll Enterprise Server.



Server

Store Data with KnowItAll Enterprise Server

The KnowItAll Enterprise Server is a technology platform designed specifically for the creation of an enterprise-wide Spectral Data Warehouse in a dynamic, heterogeneous laboratory environment. The system is fast, reliable, secure, and scalable, requires minimal support and maintenance, and allows centralized access to all of an organization's spectra, chromatograms, and structures via a single, unified platform.



Web Client

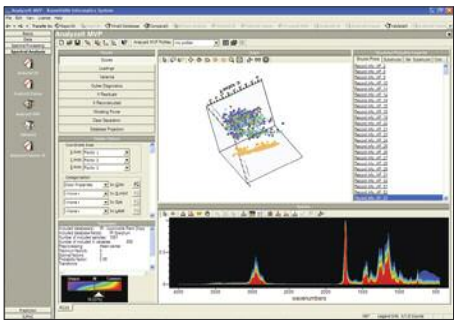
Search Data with KnowItAll AnyWare™

Designated users can access data stored on the KnowItAll Enterprise Server using KnowItAll AnyWare—a powerful browser-based interface designed to search spectra, structures, and related chemical properties securely behind your firewall. No software installation is required, making deployment effortless. It is platform independent and can be used with any web browser, including Internet Explorer, Firefox, Safari, or Chrome.

Windows Client

Analyze Data with KnowItAll Informatics System

Bio-Rad's award-winning KnowItAll Informatics System software for Microsoft Windows allows users to search data stored on the KnowItAll Enterprise Server and offers advanced tools for analyses and reporting so that users can take the data from your warehouse to the next level: knowledge. Tools include: mixture analysis, polymer analysis, overlap density heatmaps, chemometrics, and more. Also includes advanced tools for database building and editing.



Licensing Information

Bio-Rad makes the licensing of their software and databases simple. Spectral databases and software can be licensed via the Internet or USB dongle.

Support & Upgrade Policy

Please visit www.knowitall.com/supportpolicy

Training Options

If you require more training beyond the resources provided (on-line help system, KnowItAll User Manual PDF, demo movies), we would be pleased to discuss additional training options. Please visit www.knowitall.com/training

KnowItAll System Recommendations

Find the latest system recommendations at www.knowitall.com/system_recommendations

Additional Information Available

- Get Quote - www.knowitall.com/getquote
- Literature PDF Library - www.knowitall.com/literature
- Contact Information - www.knowitall.com/contactus

BIO-RAD

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