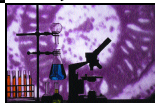


Monomers & Polymers Vol. 1 (Modified)



4220 Monomers and Polymers (Vol. 1) - 1,790 Spectra

The spectra are of commercial products, including additives, and were 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. The compounds have been selected and reviewed by Richard A. Nyquist, Ph.D. This collection includes many classic compounds, which makes it particularly useful as a reference. Each compound is identified by its commercial or trade name.

The following additional information will also be supplied when available: chemical composition, source of sample, technique and classification. Databases designated as Vol. 1 and Vol. 2 are independent of each other and do not contain duplicate spectra.

Infrared spectroscopy is, perhaps, the most commonly used analytical technique for polymer and plastics analysis. Analytical applications include identification, quality control, deterioration studies, materials selection, plus other applications such as classroom instruction. These applications in nearly all cases require some type of reference spectra with which to substantiate one's analytical suspicions or, to design an analytical approach. The MONOMERS & POLYMERS VOLUME 1, IR DATABASE is useful in all such applications.

Bio-Rad has compiled a collection of monomers, polymers and precursors commonly encountered in both industry and academia. This database contains 1790 infrared reference spectra selected to help satisfy a high percentage of analytical applications for this area of technology. The commercial name, description, manufacturer information and method of sample preparation for analysis are presented for each compound along with the spectrum.

The spectra are arranged into chemical classes, and have been placed in order of increasing chemical complexity within each class. The following is a breakdown of the 49 monomer and polymer classes presented in the database.

Classifications

Polymers	1297	Cellulosics	43	Compounds containing Phosphorous	96
Paraffins	4	Epoxy Resins	52	Alcohols and Phenols	46
Polyethylenes	45	Vinyl Polymers and Copolymers	158	Compounds containing Sulfur	39
Polybutenes	24	Phenolic Resins	77	Acrylates and Methacrylates	42
Polypropylenes	42	Polyacrylic Acids and Salts	19	Amines	98
Polybutadienes	76	Acrylic and Methacrylic Polymers	51	UV Light Absorbers	23
Polyisoprenes	18	Polyesters	91	Amides	15
Coumarone-Indene Resins	14	Rosins and Polymerized Fats	32	Compounds containing Nitrile	4
Polyterpenes	12	Aminoplasts	27	Miscellaneous Carboxylic Acid Esters	24
Polystyrenes	128	Polyamides, Polyimides and Polyimines	52	Carboxylic Acids	26
Fluorinated Hydrocarbons	20	Polyvinylpyrrolidones	9	Anhydrides	22
Chlorinated Hydrocarbons	37	Polyvinylpyridines	13	Carboxylic Acid Chlorides	3
Silicones	46	Ion Exchange Resins	22	Aldehydes, Ketones, Oximes and Quinones	5
Polyurethanes and Urethane Prepolymers	103	Polymers containing Sulfur	10	Phthalates	3
Acetals	8			Aromatic Hydrocarbons	3
Polyethers	47	Monomers and Precursors	503	Oxides and Peroxides	5
Thioplasts	10	Compounds containing Halogen	37	Organometallics	10
Anhydride Polymers	7				



**Bio-Rad
Laboratories**

Informatics Division
www.informatics.bio-rad.com

U.S. Sales

Phone: +1 888 5 BIO-RAD • E-mail: informatics.usa@bio-rad.com

Europe

Phone: +44 20 8328 2555 • Free phone: 00800 78945000 • E-mail: informatics.europe@bio-rad.com

Japan

Phone: +81 03 (5811) 6287 • E-mail: informatics.nbr@jp.bio-rad.com

Rest of World

Phone: +1 215 382 7800 • E-mail: informatics.row@bio-rad.com