

IR - Sadtler Polymers, Hummel - Wiley

Spectra - 1,905

Description

Infrared spectroscopic analysis of polymers will always assume an important position among physical methods of analyzing macromolecular systems. It allows for the identification of structural units in complex macromolecular systems, as well as the vibrational analysis of highly ordered polymer systems.

This database, which contains 1,905 spectra, is a product of a cooperative effort between Professor Dieter Hummel of the University of Cologne and Bio-Rad Laboratories. It includes a wide range of polymers, copolymers, and polymer additives and covers 82 classes of compounds.

Additional Information

The following information will also be supplied with each database record when available: chemical and physical description, source of sample, technique, comments, literature reference, classification, source of spectrum, method of synthesis, molecular formula, use, spectrometer, and empirical formula.

Classifications

Polyethylenes	26	Vinyl Chloride Copolymers	34	Polyvinylpyridines	12
Polypropylenes	28	Polyvinyl Alcohols	2	Polysulfones	9
Petroleum Hydrocarbon Resins	14	Polyvinyl Ethers	1	Sulfonated Polymers	20
Synthetic Waxes	8	Polyvinyl Acetals	4	Miscellaneous Polymers	6
Polybutenes & Butyl Rubbers	14	Polyvinyl Esters	16	Vegetable Oils	55
Polybutadienes	40	Polyvinyl Acetate Copolymers	30	Aliphatic Unsaturated Hydrocarbons	17
Synthetic Polyisoprenes & Natural Rubbers	14	Polyvinylidene Polymers	23	Aliphatic Saturated Hydrocarbons	14
Aliphatic Hydrocarbon Copolymers	8	Miscellaneous Vinyl Polymers	47	Aromatic Hydrocarbons	10
Coumarone-Indene Resins	2	Hydroxyethyl Cellulose	1	Halogenated Hydrocarbons	3
Other Cyclic Hydrocarbon Resins	26	Cellulose Ethers	5	Compounds Containing Silicon	27
Polystyrenes	15	Carboxymethyl Cellulose & Salts	1	Cyanates, Isocyanates, Nitriles	23
Styrene-Butadiene Copolymers	1	Cellulose Esters & Mixed Esters	19	Ethers	13
Other Styrene Copolymers	93	Miscellaneous Carbohydrate	24	Oxides & Peroxides	1
Fluorocarbon Resins	51	Derivatives	24	Amines	15
Chlorinated Hydrocarbon Resins	41	Phenolic Resins	60	Compounds Containing Halogen	
Silicone Polymers	61	Acrylic Copolymers	48	Compounds Containing Sulfur	8
Acrylonitrile-Butadiene-Styrene Resins	9	Polyacrylic & Polymethacrylic Esters	77	Compounds Containing Phosphorus	5
Polyurethane And Urethane Prepolymers	88	Polyacrylic & Polymethacrylic Acids & Salts	11	Alcohols & Phenols	14
Butadiene-Acrylonitrile Copolymers	37	Polyesters	126	Aldehydes, Ketones, & Quinones	5
Styrene-Acrylonitrile Copolymers	8	Polycarbonates	20	Carboxylic Acids	29
Other Nitrile Polymers	11	Alkyds	39	Anhydrides	7
Thioplasts/Polysulfides	29	Resin Modified Alkyds	21	Acrylates & Methacrylates	29
Polyethers	88	Natural Resins	98	Phthalates	6
Anhydride Polymers	15	Rosin & Rosin Derivatives	3	Miscellaneous Esters	11
Unmodified Epoxy Resins	10	Aminoplasts/Polyamines	119	Ureas, Amides, Cyanurates	20
Modified Epoxy Resins	14	Polyamides	116	Organometallics	18
Vinyl Chloride Homopolymers	20	Polyimides	49	Miscellaneous Monomeric Compounds	2
Plasticized Polyvinyl Chlorides	5	Polyvinylpyrrolidones	1		