Raman - Sadtler Polymers & Monomers (Basic) 1 - Wiley
Spectra - 1,680

Description

Wiley has compiled a collection of basic monomers and polymers commonly encountered in both industry and academia. The database contains 1,680 reference spectra (identified by chemical name), which have not been modified with any additives, although they may be copolymers or terpolymers. Compounds were selected to provide representative materials for identification and classification. Applications include quality control, deterioration studies, materials selection, etc.

Additional Information

Manufacturer source information is presented with each reference spectrum so that the availability of a selected material that matches the measured raman spectrum can be determined by contacting the specified commercial producer.

Classifications

Polymers - 873
Monomers - 1102
Polyethelenes - 25
Polypropolenes - 18
Polybutenes & Butyl Rubbers - 18
Polybutadienes - 19
Synthetic Polyisoprenes/Natural Rubbers - 3
Aliphatic Hydrocarbon Copolymers - 12
Coumarone-Indene Resins - 2
Polystyrenes - 23
Styrene-Butadiene Copolymers - 11
Other Styrene Copolymers - 24
  (Excluding Nitriles)
Other Aromatic Vinyl \ Hydrocarbons - 2
Flurocarbon Resins - 14
Chlorinated Hydrocarbon Resins - 32
Silicone Polymers - 17
Acrylonitrile-Butadiene-Styrene Resins - 5
Polyurethane & Urethane Preplymers - 14
Butadiene-Acrylonitrile Copolymers - 10
Styrene-Acrylonitrile Copolymers - 4
Other Nitrile Polymers - 15
Thioplasts/Polysufides - 8
Polyethers - 67
Anhydride Polymers - 8
Epoxy Resins - 29
Vinyl Chloride Homopolymers - 10

Vinyl Chloride Copolymers - 14
Polyvinyl Alcohols - 25
Polyvinyl Ethers - 5
Polyvinyl Acetals - 2
Polyvinyl Esters - 15
Polyvinyl Acetate Copolymers - 22
Polyvinylidene Polymers - 8
Miscellaneous Vinyl Polymers - 20
Cellulose Compounds - 28
Misc. Carbohydrate Derivitives - 16
Phenolic Resins - 13
Acrylic Copolymers - 19
  (See Also Styrene Copolymers)
Polyacrylic & Polymethacrylic Esters - 49
Polyacrylic/Polymethacrylic - 10
   Acids & Salts
Polyesters - 45
Polycarbonates - 9
Alkyds - 13
Rosin & Rosin Derivities - 8
Aminoplasts/Polyamines - 18
Polyamides - 34
Polyimides - 14
Polyvinylpyrrolidones - 9
Polyvinylpyridines - 16
Polysufones - 9
Sulfonated Polymers - 5

Ion Exchange Resins - 40
Polymerized Fats -1
UV Light Absorbers - 11
Miscellaneous Polymers - 5
Aliphatic Unsaturated Hydrocarbons - 8
Cyclic Unsaturated Hydrocarbons - 5
Aromatic Hydrocarbons - 22
Halogenated Hydrocarbons - 4
Compounds containing Silicon - 16
Cyanates, Isocyanates, Nitriles - 21
Ethers - 55
Oxides & Peroxides - 17
Amines - 130
Compounds containing Halogen - 90
Compounds containing Sulfur - 85
Compounds containing Phosphorous - 53
Alcohols & Phenols - 99
Aldehydes, Ketones, & Quinones - 23
Carboxylic Acids - 45
Anhydrides - 11
Acrylates & Methacrylates - 196
Phthalates - 11
Esters - 84
Carboxylic Acid Chlorides - 1
Ureas, Amides, Cyanurates - 81
Organometallics - 32
Carboxylic Acid Salts - 13

Technique

The spectra were analyzed using a BIO-RAD FTS175C with a FT-IR Raman accessory. The spectra were generated using FT-RAMAN (Nd3+:YAG 1064 nm laser). The resultant spectra were referenced to an internal white light source and baseline corrected. The data was collected in the region of 150-3600 cm^{-1} Stokes shift.

This collection has been subject to the Sadtler Data Review Protocol™ to provide you with the highest standard in spectral data today. These rigorous qualifying procedures start at data acquisition and continue throughout the database development process.