IR - Sadtler Polymers, Controlled Pyrolyzates - Wiley

Spectra - 2,965

Description

The pyrolysis technique is commonly used in the infrared identification of polymers. The database includes 2,965 infrared spectra representing the volatile and non-volatile pyrolyzed fractions of 1,493 polymers. It can be used by researchers to identify principal polymer types.

Each chemical is represented by the description of the polymer, as well as the spectra of the volatile and nonvolatilen pyrolysis products labeled with the temperature of pyrolysis. The volatile fraction is labeled as vapor phase, and the non-volatile fraction is labeled as solid or condensed phase. The temperature of the sample compartment is also included.

Additional Information

This collection contains the spectra of polymers which have been pyrolyzed at a constant specified temperature. The samples provide representative examples of over 40 different types of polymers.

Each compound is identified by its commercial or trade name. The following additional information will also be supplied when available: chemical composition, chemical and physical properties, source of sample, and technique.

Classifications

POLYMERS

Polyethylenes - 302
Polypropylenes - 100
Petroleum Hydrocarbon Resins - 36
Synthetic Waxes - 6
Polybutenes & Butyl Rubbers - 40
Polybutadienes - 16
Polyisoprenes & Natural Rubbers - 24
Hydrocarbon Copolymers and Terpolymers - 92
Coumarone-Indene Resins - 12
Polyterpenes & Naphthene Resins - 10
Other Unsaturated Hydrocarbon Resins - 8
Polystyrenes - 90
Styrene-Butadiene Copolymers - 82
Other Styrene Copolymers & Terpolymers - 36
Fluorinated Hydrocarbons - 36
Chlorinated Hydrocarbons - 44
Silicone Polymers - 18
Acrylonitrile-Butadiene-Styrene Resins - 64
Polyurethanes & Urethane Prepolymers - 82
Butadiene-Acrylonitrile Copolymers - 58
Styrene-Acrylonitrile Copolymers - 14
Other Nitrile Polymers - 45
Polyethers - 48
Anhydride Polymers - 28
Oxides - 18
Epoxy Resins - 36
Ionomers - 4
Vinyl Chlorides - 192
Vinyl Polymers & Copolymers - 170
Cellulose Derivatives - 48
Phenolic Resins - 96
Acrylic Copolymers - 28
Polyacrylates & Polymethacrylates - 84
Polyacrylic & Polymethacrylic Acids & Salts - 6
Polyesters - 126
Polycarbonates - 36
Alkyds - 6
Rosins & Polymerized Fats - 48
Aminoplasts - 8
Polyamides, Polyimides, & Polyimines - 295
Polyvinylpyrrolidones - 2
Polyvinylpyridines - 4
Ion Exchange Resins - 84
Polymers containing Sulfur - 30
UV Light Absorbers - 4
Miscellaneous Polymers - 78

MONOMERS & PRECURSORS

Hydrocarbons - 6
Compounds containing Silicone - 18
Compounds containing Nitrogen - 74
Oxides and Peroxides - 8
Compounds containing Halogen - 32
Compounds containing Sulfur - 14
Compounds containing Phosphorous - 6
Alcohols and Phenols - 50
Aldehydes, Ketones, Oximes, & Quinones - 18
Anhydrides - 2
Phthalates - 34
Esters - 44
Salts - 4
Organometallics - 34
Miscellaneous Monomers - 26

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.