IR - Sadtler Fibers by Microscope - Wiley

Spectra - 450

Description

This database contains high-quality reference spectra of commercially available synthetic fibers measured by FT-IR microscope.

Additional Information

The database includes chemical classification, trade name, and manufacturer identification. The spectra were measured using a FT-IR microscope for the Reference Collection of Synthetic Fibers assembled by Collaborative Testing Services Inc., Herndon, Virginia, U.S.A. by Dr. Eileen J. Carnahan, Micro-Scan Services Inc., Schenectady, New York, U.S.A.

Classifications

Acetates (27 spectra) - A manufactured fiber in which the fiber-forming substance is produced from partially hydrolyzed cellulose acetate.

Acrylics (25 spectra) - A manufactured fiber made by polymerization of acrylonitrile.

Aramids (4 spectra) - A synthetic fiber in which the fiber-forming substance is made from a nitrile binder.

Fluorocarbons (7 spectra) - A manufactured fiber made from a fluorocarbon resin.

Modacrylics (4 spectra) - A synthetic fiber composed of less than 85% and more than 35% by weight of acrylonitrile units.

Nylons (114 spectra) - A manufactured fiber in which the fiber-forming substance is any long-chain synthetic polyamide having recurring amide groups as an integral part of the polymer chain.

Olefins (86 spectra) - Long-chain polymeric material produced by the chain reaction of olefinic monomers.

Polycarbonates (1 spectrum) - A thermoplastic synthetic resin made from bisphenol and phosgene.

Polyesters (139 spectra) - A manufactured fiber in which the fiber-forming substance is any long chain synthetic polymer composed of at least 85% by weight of an ester of dihydric alcohol and terephthalic acid.

Rayons (35 spectra) - A manufactured fiber composed of regenerated cellulose, as well as manufactured fibers composed of regenerated cellulose in which substituents have replaced not more than 15% of the hydrogens of the hydroxyl groups.

Rubber (7 spectra) - A fiber composed of natural or synthetic rubber.

Sarans (2 spectra) - A manufactured fiber in which the fiber forming substance is any long-chain synthetic polymer composed of at least 80% by weight of vinylidene chloride units.

Spandex (3 spectra) - A manufactured fiber in which the fiber-forming substance is a long chain synthetic polymer comprised of at least 85% of a segmented polyurethane.

Sulfars (1 spectrum) - A manufactured fiber in which the fiber forming substance is a long synthetic polysulfide in which at least 85% of the sulfide linkages are attached directly to two aromatic rings.

Triacetates (2 spectra) - A fiber manufactured from cellulose acetate in which 92% or more of the hydroxyl groups are acetylated.

Vinyons (1 spectrum) - Any manufactured fiber made of a long chain synthetic polymer composed of at least 85% by weight of vinyl chloride units.

Technique

The spectra were measured on 450 fiber and yarn samples, and multiple spectra are provided for two or more components in a yarn.

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.