

ATR-IR - Sadtler Polymers & Monomers (Basic) 3 - Wiley

Spectra - 455

Wiley is the leading producer of IR and Raman spectral databases with their Sadtler Spectral Databases, known for their high-quality.

Description

This Sadtler database contains ATR-IR spectra of basic polymers recommended for polymer and testing laboratories to identify unique polymers by infrared spectroscopy.

Additional Information

Each compound in this database is identified by its polymer/chemical name, method of analysis, source of spectrum, source of sample, and appearance. It also includes catalog number, CAS Registry number, melting point, boiling point, molecular weight and formula, and other properties if available

Technique

Some spectra were measured on a Bio-Rad FTS-175C Fourier Transform infrared spectrometer equipped with KBr beam splitter and a peltier cooled DTGS detector. A Smiths Detection DuraSamplIR™ II Diamond ATR Accessory, an in-compartment diamond attenuated total reflectance accessory, was used to produce the ATR spectra. It is configured for single bounce optics through the diamond minimizing the effects of the diamond in the 2300 wavenumber region. It has KRS5 optics yielding a full spectral range of 4000-400 wavenumbers.

This data is fully applicable to microscope FTIRs with ATR objectives, as well as bench-top systems with ATR units. Samples were analyzed using the neat or film method and the solvent used in the film is methylene chloride. In some cases, the samples were ground to improve the display of the ATR spectrum.

Some spectra were measured on a PerkinElmer SPECTRUM 2 fourier transform infrared spectrometer equipped with a diamond ATR accessory and LiTaO3 detector. It is configured for single bounce optics through the diamond minimizing the effects of the diamond in the 2300 wavenumber region, with a full spectral range of 4000-400 wavenumbers. The collected spectra were measured with a nominal spectral resolution of 1 cm⁻¹.

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.