

ATR-IR - Sadtler Inorganics 1 - Wiley

Spectra - 265

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 the ATR-IR spectra and other supporting information for 265 inorganic compounds. It can be used to facilitate the structural determination and identification of these compounds.

Additional Information

Each compound is listed by the name by which it is most commonly cited in the literature. Other information accompanying each spectrum includes the source of the material and the method used in sample preparation. Frequently used synonyms, melting point, CAS Registry number, and other properties are included if available.

Technique

All 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 DuraSampIR™ 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.

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.