## IR - Standards (Subset) 2 - Bio-Rad Sadtler

Product Code - 400000 Spectra - 2,500

## Description

This spectral database contains 2,500 infrared spectra of pure organic chemicals, which can be used to identify and classify pure samples. It was prepared from compounds found in chemical catalogs and used by scientists in their laboratories.

The purpose of this database is twofold:

- For those who are employed in industry and resort to infrared spectroscopy for the identification of organic compounds, this collection of spectra serves as a reference when comprehensive collections are not available.
- It satisfies the academic need for a small IR collection of organic compounds relevant to college courses on organic chemistry and supplemental laboratory courses on experimental organic chemistry and qualitative organic analysis.

It is important to note that in addition to its basic components, commercial samples contain a number of other materials for the purpose of formulating and processing. This database assists in characterizing and identifying these compounds.

## **Quality Control**

This collection has been subject to the Sadtler Data Review Protocol<sup>™</sup> 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.

Below is a brief outline of the steps that each spectrum must undergo in order to achieve our high standard of quality.

All of the compounds in the standards (pure organics) collection underwent a quality control check before their spectra and data were collected. The chemicals are first analyzed by proton NMR. If the compounds are found to be less than 98% pure, they are rejected. Approximately 20 to 30 percent of all compounds tested are rejected for impurities.

Qualifying procedures on all spectra start with data acquisition and continue throughout the course of database development. Our quality control and standardized techniques are not the only assurance our customers receive when they purchase our databases. Our databases do not start out as a collection of archived QC data. Unlike other commercial databases, we built this and all of its databases for the sole purpose of creating a searchable reference library. That means rigid QC, techniques that provide unobstructed, representative, and highly-resolved spectra, internal and external reviewers, and value-added information such as structures are required.