IR - Sadtler Prepared & Prescription Drugs (Acid) (Base) Wiley

Spectra - 885

Description

These databases contains infrared spectral data of 454 prepared drugs which are commercially available in dosage forms. The selection of materials for inclusion in the database was made from the *Physicians Desk Reference* and includes all categories of application classification. Preparations containing both a single active ingredient and formulated ingredients are represented in this database.

The data has been developed to provide the analytical chemist with a rapid method of characterizing drugs through a simple preparation technique, without the time required for prolonged separation procedures. Consequently, the spectra will not necessarily show the complete structure of the active ingredient(s), but will be characteristic of the trade name material.

The simple preparation procedure used in preparing this database is described below. The spectra have been determined from a dried filtered chloroform extract of the acidified or basic dosage form. In most cases only the active ingredient(s) are extracted from the dosage form since excipients, such as starch and sugars, are insoluble in chloroform. The use of this procedure is not intended to identify all active ingredients of the products. In a few cases, due to the nature of the drug, the separation technique resulted in only the basic or acidic extract providing significant infrared data. In such cases only the relevant spectrum for the material is presented. The scans of basic extract and acidic extract for each compound are shown in separate databases.

Additional Information

Each compound is identified by its commercial or trade name. The following additional information is also included when available: chemical composition, physical description, use, synonyms, molecular formula, molecular weight, source of sample, and technique.

The trade name of each drug is shown with the corresponding spectrum together with the generic name or names of the components. The concentration of active ingredients in the single dosage form examined is also included. The manufacturer's name and the nature of the dose also appears.

Technique

Sample preparation procedure is as follows. The complete pill or capsule content was ground and to the total powdered sample was added 5 ml of chloroform and sufficient ammonia or caustic soda to render the mixture alkaline. The mixture was dried by shaking with a neutral drying agent, e.g. molecular sieves. The dried chloroform extract was then filtered onto a salt plate and evaporated to form a film on the plate. The residue from the extraction was preserved (the evaporation technique occasionally resulted in a powdered sample forming on the salt plate; in these circumstances the powder was scraped from the plate and a KBr pellet prepared for running the spectrum). The infrared spectrum of the film was measured immediately, (standing in air could cause decomposition). The undissolved residue from the basic extraction was remixed with 5 ml of chloroform and sufficient HCl to render this mixture acidic. The drying, filtering and evaporation procedures were repeated on this extract and the spectrum of the acidic extract measured immediately.

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.

Classifications

Anti-Infection Agents Antibacterials Antibiotics Antifungals Anti-Infectives	227 49 86 14 7	Antiemetics Antihelmintics Antilipidemics Antineoplastics Antiseborrheics	6 6 3 23 4	Ophthalmic Preparations Mydriatics Ophthalmics Pain Medications	23 6 17 123
Antimalarials Antimicrobials Antituberculars Antivirals Germicides Trichomonacides	10 28 9 2 14 8	Applicators Dilators Diuretics Enzymes Geriatics Hematinics Hemostatics	2 9 25 6 2 12 4	Analgesics Anti-Inflammatorys Antimigraines Psychotropics Antidepressants	87 33 3 125 17
Cardiovascular Agents Antiarrhythmics Anticoagulants Antihypertensives Cardiac Agents	117 4 8 23 28	Inhibitors Laxatives Therapeutic Agents Uricosurics Dietary Supplements Vitamins	8 8 6 2 49	Antipsychotics Relaxants Sedatives Stimulants Tranquilizers	12 16 20 7 53
Hypotensives Vasodilating Agents	20 34	Hormones Androgens	42 12	Seizure Compounds Anticonvulsants Epilepsy Agents	27 21 4
Cold And Cough Preparations Antihistamines Antitussives Decongestants Expectorants	56 21 14 14 7	Contraceptives Oxytocics Progestogens Thyroid Medications Nervous System Agents	12 1 4 13 130	Spasmolytics	2
Control Agents Anesthetics Antacids Antiasthmas Antidiabetics	145 5 4 6 2	Adrenergics Anticholinergics Parasympatholytics Sympathomimetics	14 38 66 12		