

IR - Inorganics (Subset) - Bio-Rad Sadtler Database

Product Code - 445900

Spectra - 245

Description

This database contains the infrared absorption spectra, physical constants and other supporting information for 245 inorganic compounds. It can be used to facilitate structural determination and identification of these compounds.

The spectra are representative of many anions and polyatomic ions common to inorganic materials and are classified according to anion or polyatomic ion following groups in the periodic chart. The sequence is also sub-ordered so that all spectra containing a common element are presented together. The position in the periodic chart of the central atom in the anion is the determining factor in this arrangement, and in instances where there is no central atom, the anions are arranged by lower numbered group in the chart. Thus, the anions are presented in order of increasing group number first and then increasing atomic number within the given group. This arrangement serves to facilitate recognition of characteristic group frequencies by grouping together compounds containing similar anions.

Additional Information

Each compound is listed by its Chemical Abstracts name or the name by which it is most commonly cited in the literature. Other information accompanying each spectrum includes molecular formula, molecular weight, source of the material, and method used in sample preparation. Frequently used synonyms, density, melting point, solubility, color and/or crystalline structure, CAS Registry number, RTECS number, and comments are also included if available. Density values are given at 20 +/- 5C unless otherwise indicated by a number in parentheses following the value. Values for solubilities are given in grams of the compound per 100 grams of the solvent at the temperature indicated also in parentheses following the value.

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

Boron - 13	Zirconium - 2	Bismuth - 1	Tellurium - 3	Bromine - 5
Aluminum - 3	Tin - 3	Vanadium - 5	Chromium - 5	Iodine - 9
Carbon - 26	Nitrogen - 19	Niobium - 1	Molybdenum - 7	Manganese - 1
Silicon - 7	Phosphorus - 20	Oxygen - 24	Tungsten - 9	Rhenium 1
Germanium - 1	Arsenic - 6	Sulfur - 22	Fluorine - 22	Osmium - 1
Titatnium - 6	Antimony - 1	Selenium - 7	Chlorine - 16	Cobalt - 2