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Spectral Databases

From the leader in spectral data



IR - Sigma-Aldrich Library of FT-IR Spectra - Wiley

Spectra - 11,270

This database is available as part of the KnowltAll IR Spectral Library Collection subscription.



Description

The Sigma-Aldrich Library of FT-IR Spectra is a world-class collection of spectra sourced from the laboratories of Sigma-Aldrich* by Merck KGaA Darmstadt, Germany. Featuring over 11,000 pure compounds and over 11,270 spectroscopic records, this collection includes Sigma-Aldrich catalog numbers, ensuring quick and accurate ordering of standards from Sigma-Aldrich.

Containing all new spectra, the Sigma-Aldrich Library of FT-IR Spectra works with existing workflows for confident identification. The library includes compound properties (molecular formula, mass, compound class) and FT-IR spectroscopic data, which has been evaluated by Wiley and third-party experts.



Applications

- Environmental
- Food science
- Forensics
- Pharmaceuticals

- Polymers
- Plastics
- Quality control

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Additional information

When it comes to spectral analysis, the more data you have the better. Wiley spectral databases provide much more information than simply the spectrum. Database records include the following valuable details when available:

- Chemical structure
- Chemical name
- Source of sample
- Formula
- CAS Registry numbers

- Instrument
- InChl/InChlKey
- Molecular weight
- Properties



Compound coverage

- 5-membered aromatic heterocycles and fused aromatic heterocycles
- 6-membered aromatic heterocycles and fused aromatic heterocycles
- Alkvnes
- Aromatic compounds: acid halides, alcohols and phenols, aldehydes, amides, amines, amino acids and acid salts, anhydrides, carboxylic acids, esters and lactones, ethers, halogenated hydrocarbons, hydrocarbons, ketones, mercaptans and sulfides, nitriles & cumulated double bonds, nitro and nitroso compounds, phosphorus compounds, sulfur-oxygen compounds
- Boranes
- Coordination and complex compounds
- Deuterated compounds
- Heterocyclic N-oxides
- Mineral acids
- Non-aromatic compounds: acid halides, acid salts, alcohols, aldehydes, amides, amines, amino acids, amino acids, anhydrides, carboxylic acids, esters and lactones, ethers, acetals and epoxides, halogenated hydrocarbons, hydrocarbons, ketones, mercaptans and sulfides, nitriles & cumulated double bonds, nitro and nitroso compounds, phosphorus compounds, sulfur-oxygen compounds
- Non-metallic inorganics
- Organometallic and arsenic compounds
- Oximes
- Polymers
- · Schiff bases, azobenzenes, indicators & dyes
- Silanes
- Solutions
- Steroids and indole alkaloids



Library specifications

• FT-IR Spectra: 11,270

Distinct Sigma-Aldrich Catalog

Numbers: 11,270

• Searchable Chemical Structures:

11,240

• Unique Compounds: >11,200

Structures with InChl Key: 11,097CAS Registry Numbers: 11,171



Technique

Featured spectra were measured in the spectral range of 4000 to 400 cm⁻¹.



Compatibility

For full compatibility information, please visit sciencesolutions.wiley.com/compatibility.



Trusted data from a trusted source

Wiley is the authoritative source for spectral data. Our renowned databases are processed according to rigorous protocols to ensure they are of the highest quality. Qualification procedures start at data acquisition and continue throughout the database development process. Any data acquired from trusted partners is thoroughly vetted before inclusion in our collections.