DESCRIPTION

Extensively validated to ensure positive lipid identification

The *Lipids Mass Spectral Database* contains 430 GC mass spectra registered from a pure standard and categorized into 11 classes of lipids. The database provides significant support for peak assignment in complex mixtures, making it a valuable tool in many research areas such as food analysis and clinical and medical applications.

Over 1,400 Linear Retention Index (LRI) values for the 430 lipid-like molecules, experimentally calculated for each standard under repeatable chromatographic conditions and using three different stationary phases, namely SLB-5ms, Equity-1, and Supelcowax-10 (Supelco). LRI were also calculated using different reference mixtures, namely alkanes, fatty acid methyl esters (FAMEs), and fatty acid ethyl esters (FAEEs). Additional component information such as CAS number, common name, systematic name, nominal mass (as Mol Wt.), compound formula, chemical class, and suppliers of the standards are also included.

**Library Specifications:**

Spectra: 430  
Structures: 430  
Unique Compounds: 428  
LRI Values: > 1,400
Classes of lipids: 11

**Compatibility:**

Agilent ChemStation, MassHunter, OpenLab

Bruker MS Workstation

Chromatec Analytic

JEOL msFineAnalysis

LECO ChromaTOF

NIST MS Search

PerkinElmer TurboMass

Scion MS Workstation

Thermo Chromeleon, TraceFinder, Xcalibur

Waters MassLynx

Other versions available:

ACD/Labs ACD/Spectrus Processor*

Bio-Rad KnowItAll®*

Wiley Spectra Lab*

*Subscription required

A version in the Shimadzu GCMSsolution format is available directly from Shimadzu.

**Compound Coverage:**

Compound coverage can be searched at www.compoundsearch.com. The number of compounds in each class is listed below:

- Alkanes: 34
• Fatty acid ethyl esters: 27
• Fatty acid methyl esters: 199
• Fatty acid trimethyl esters: 14
• Fatty alcohols: 24
• Fatty aldehydes: 48
• Isoprenoids: 2
• Quinones and hydroquinones: 3
• Sterol trimethylsilyl esters: 12
• Sterols: 3
• Wax monoesters: 64

---

**ABOUT THE AUTHOR**

Luigi Mondello is an expert in the field of multidimensional chromatography. He has published a number of books and papers in his field and has been an invited speaker at a number of conferences. He is Editor of the Journal of Separation Science. Recently he was awarded The Chromatographic Society’s Silver Jubilee Medal award for his work in the field of chromatography and the COLACRO Medal for his contribution to the development and diffusion of the Chromatographic Techniques, and the HTC-Award for the most outstanding and innovative work in the field of hyphenated chromatographic techniques from the Flemish Chemical Society. He is currently Full Professor of Analytical Chemistry at the University of Messina in Italy and permanent member of the scientific committee of the International Symposium on Capillary Chromatography; the International Symposium on Essential Oils; the International Symposium on Hyphenated Techniques in Chromatography and Hyphenated Chromatographic Analyzers; the Brazilian Symposium on Chromatography and Related Techniques; and the Congresso Latino-Americano de Cromatografia en Tecnicas Relacionades.

---

To purchase this product, please visit [https://www.wiley.com/en-us/9781119289388](https://www.wiley.com/en-us/9781119289388)