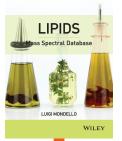
Lipids Mass Spectral Database

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Introduction



Lipids are one of the major constituents of food and they have an essential role in human diet, metabolism, physiological and pathological processes. Mass spectrometry is the most important technology for lipid analysis. The *Lipids Mass Spectral Database* gives a significant support for peak assignment in complex mixtures and can be a valid support in many research fields, such as food analysis, clinical and medical applications. This library contains 430 lipid-like molecules classified in 11 different classes and almost one LRI for each molecule.

Lipid Classes

- Alkanes: 34
- · Fatty alcohols: 24
- Fatty aldehydes: 48
- Fatty acid ethyl esters: 27
- Fatty acid methyl esters: 199
- Fatty acid trimethyl esters: 14

Linear Retention Index Numbers

- EQUITY-1 (Alkanes): 135
- SUPELCOWAX-10 (FAMEs): 249
- SUPERCOWAX (FAEEs): 249

Instrumentation Specifications

• SLB-5ms (FAMEs): 356

SLB-5ms (Alkanes): 430

· Wax monoesters: 64

Quinones and hydroquinones: 3

Sterol trimethylsilyl esters: 12

Isoprenoids: 2

Sterols: 3

GC-qMS analyses of pure standard components, samples, *n*-alkanes (C7-C40; Supelco #49452-U), FAMEs (Supelco, #49453-U) and FAEEs (Supelco, #49454-U) (C4-C24 even carbon) were carried out on a Shimadzu GCMS-QP2010 gas chromatograph mass spectrometer in El mode. The columns used for GC-qMS analysis were SLB-5MS (5% diphenyl + 95% dimethyl polysiloxane) 30 m × 0.25 mm ID × 0.25 µm film thickness (Supelco, #24079) and Equity-1 30 m × 0.25 mm ID × 0.25 µm film thickness (Supelco, #24079) and Equity-1 30 m × 0.25 mm ID × 0.25 µm film thickness.

Ordering Information

Lipids Mass Spectral Database CD-ROM ISBN: 978-1-119-28938-8 Lipids Mass Spectral Database, Upgrade CD-ROM ISBN: 978-1-119-28941-8

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