

70^{V1.1.70}
molecules
included

Available
Jan 2022



Providing high quality metabolite library

Volatile Fatty Molecules Mix

For GC/HPLC and Mass Spectrometry

17 Normal fatty alcohols
(C4-C20)

17 Fatty acids methyl esters
(C4-C20)

18 Fatty acid ethyl esters
(C3 - C12)

9 Fatty aldehydes
(C4 - C12)

9 Fatty ketones
(C4 - C12)



Photo by Sorin Gheorghita on Unsplash

**FULLY
QUANTITATIVE**

CONTACT US

info@metasci.ca

www.metasci.ca

Tel. +1-289-597-1611

110 West Beaver Creek

Rd, Unit 7

Richmond Hill, ON

L4B 1J9, CANADA

Identification and quantification of linear long chain molecules such as fatty alcohols, aldehydes, ketones, fatty acids and their esters play an essential role in today's analysis. Using mixtures of standards provides the advantage of recording the chromatograms and the mass spectra of several compound in one run, making the analysis and calibration tens of times faster. Our Volatile Fatty Molecules Mix is designed to provide the highest resolution chromatogram for GC compatible methods as well as a high purity single peak spectrum for each molecule. All compounds come in 1.0 mM concentration in dichloromethane which makes the product highly stable (no trans-esterification by alcoholic solvent). An extended version of this mixture is available for liquid chromatography which contains fatty acids and its glycerol esters.

Why digital libraries (NIST, METLIN, etc.) are not enough?

Every instrument yields an analysis result specific to its brand, build, methods and other parameters. Digital libraries only contain spectra resulted from the instrument of its producer and lose quality as it is used for other machines. To produce the most accurate result for each instrument, a lab should run physical standards on every instrument and on each when the methods or conditions (column, solvent, pH, etc) changes.

www.metasci.ca

70 Volatile fatty molecules

high purity, single peak, completely resolved
1000µM in dichloromethane

25 High recovery microampules

each set of standard is provided in five 200µL microampules
totaling 1mL of standard solution

One internal standard

to adjust your retention time with IS lock

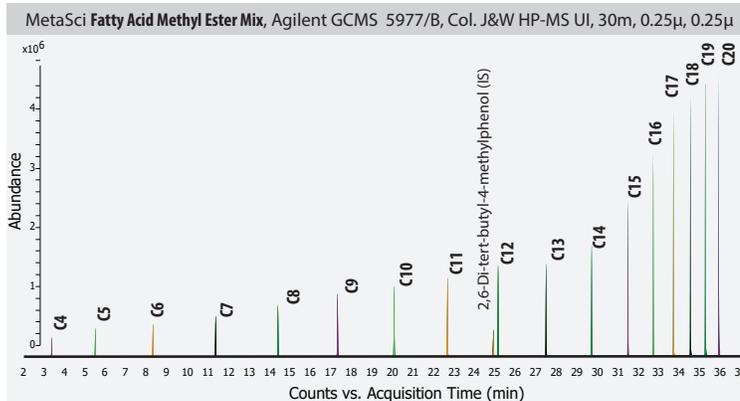
Zero isobaric interference

allows identification with single quad mass spectrometer without a
need for digital libraries for identification

Comes with

Spectral analysis	Analysis method	HPLC/UHPLC	GC
Certificate of analysis	Color coded vials	Single Quad	QQQ
		QTOF	

Works with



GC/FID, HPLC-ELSD, HPLC-CAD

- Adjust the retention time of molecules after changing the method
- Adjust the retention time of molecules after changing the column
- Use the standards to make calibration curves for quantification

GCMS (single quad), HPLC-MS (single quad):

- Adjust the retention time of molecules after changing the method
- Add the compound to your in-house library for enhanced compound search/identification with RT and MS/z value

GCMS/MS (triple quad), HPLC-MS/MS (triple quad):

- Acquire the transition ions for each molecule using your instrument specific settings
- Use the standards to make calibration curves for quantification

GCMS/MS (QTOF), HPLC-MS/MS (QTOF):

- Use the standards to make calibration curves for quantification
- Add the compound to your in-house library for enhanced search with RT MS/z value

List of the molecules (V1.1.70)

Fatty Alcohols

1-Butanol (C4)
1-Pentanol (C5)
1-Hexanol (C6)
1-Heptanol (C7)
1-Octanol (C8)
1-Decanol (C10)
1-Undecanol (C11)
1-Dodecanol (C12)
1-Triecanol (C13)
1-Tetradecanol (C14)
1-Pentadecanol (C15)
1-Hexadecanol (C16)
1-Heptadecanol (C17)
1-Octadecanol (C18)
1-Nonadecanol (C19)
1-Docosanol (C20)

Fatty Acids Methyl Esters

Methyl butyrate (C4)
Methyl pentanoate (C5)
Methyl hexanoate (C6)
Methyl heptanoate (C7)
Methyl octanoate (C8)
Methyl nonanoate (C9)
Methyl decanoate (C10)
Methyl undecanoate (C11)
Methyl dodecanoate (C12)
Methyl tridecanoate (C13)
Methyl tetradecanoate (C14)
Methyl pentadecanoate (C15)
Methyl palmitate (C16)
Methyl heptadecanoate (C17)
Methyl octadecanoate (C18)
Methyl nonadecanoate (C19)
Methyl eicosanoate (C20)

Fatty Ketones

2-Butanone (C4)
2-Pentanone (C5)
2-Hexanone (C6)
2-Heptanone (C7)
2-Octanone (C8)
2-Nonanone (C9)
2-Decanone (C10)
2-Undecanone (C11)
2-Dodecanone (C12)

Fatty Acids Ethyl Ester

Ethyl propionate (C3)
Ethyl butyrate (C4)
Ethyl pentanoate (C5)
Ethyl hexanoate (C6)
Ethyl heptanoate (C7)
Ethyl octanoate (C8)
Ethyl nonanoate (C9)
Ethyl decanoate (C10)
Ethyl undecanoate (C11)
Ethyl dodecanoate (C12)
Ethyl tridecanoate (C13)
Ethyl tetradecanoate (C14)
Ethyl pentadecanoate (C15)
Ethyl hexadecanoate (C16)
Ethyl heptadecanoate (C17)
Ethyl octadecanoate (C18)
Ethyl nonadecanoate (C19)
Ethyl eicosanoate (C20)

Fatty Aldehydes

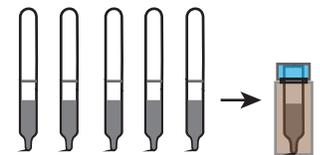
2-Butanal (C4)
2-Pentanal (C5)
2-Hexanal (C6)
2-Heptanal (C7)
2-Octanal (C8)
2-Nonanal (C9)
2-Decanal (C10)
2-Undecanal (C11)
2-Dodecanal (C12)

Provided in

patented *SnapGo*TM high recovery microampules



X A 1 mL ampule will lose quality/concentration over time after breaking open



✓ Five microampules allow injections from a fresh solution after one is used