

**PRODUCT DATA SHEET**

**GLC-100 Mixture (quantitative)**

**Catalog number:** 1104  
**Solvent:** methylene chloride  
**Storage:** -20°C  
**Concentration:** 50mg/ml  
**Volume:** 1ml  
**Source:** synthetic and plant

**GC Conditions:**  
**Column:** SP2330 or RTX2330, 30m x 0.25mm x 0.20µm  
**Oven:** 205°C isothermal  
**Carrier:** helium @ 20cm/sec.  
**Detector:** FID, 250°C  
**Injector:** 250°C

<b>Elution Order</b>	<b>Carbon Number</b>	<b>Component Name</b>	<b>% Conc. by weight</b>
1	C18:0	Methyl octadecanoate (stearate)	20.0
2	C19:0	Methyl nonadecanoate	20.0
3	C20:0	Methyl eicosenoate (arachidate)	20.0
4	C21:0	Methyl heneicosanoate	20.0
5	C22:0	Methyl docosanoate (behenate)	20.0

**Application Notes:**

This fatty acid mixture contains long chain saturated fatty acid methyl esters in methylene chloride for the qualitative identification and quantitation of unknowns. Microbial fatty acid profiles are unique from one species to another and can therefore be used in the determination of bacterial identity. All materials are analyzed to verify their identity and to determine their purity. All analytes are 98+% pure. This standard is accurately prepared by gravimetric technique (+/- 0.5%) and all glassware is class A rated. Ampules are purged with nitrogen/argon before and after filling and chilled before being flame sealed. Store ampules sealed as received and process without delay immediately after opening the ampule.

**Selected References:**

1. M. Or-Rashid, N. Odongo and B. McBride, "Fatty acid composition of ruminal bacteria and protozoa, with emphasis on conjugated linoleic acid, vaccenic acid, and odd-chain and branched-chain fatty acids" *Journal of Animal Science* vol. 85 pp. 1228, 2007
2. Y-M Zhang, S. White, and C. Rock "Inhibiting Bacterial Fatty Acid Synthesis" *The Journal of Biological Chemistry* vol. 281 pp. 17541, 2006
3. N. Rozès, S. Garbay, M. Denayrolles, A. Lonvaud-Funel "A rapid method for the determination of bacterial fatty acid composition" *Applied Microbiology* vol. 3(17) pp. 126, 1993

This product is to be used for research only. It is not intended for drug or diagnostic use, human consumption or to be used in food or food additives. Matreya assumes no liability for any use of this product by the end user. We believe the information, offered in good faith, is accurate.