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PRODUCT DATA SHEET

2-Hydroxy Methyl Ester Mixture (quantitative)

Catalog No: 1722
Solvent: chloroform
Storage: -20°C

Concentration: 10mg/ml
Volume: 1ml

GC Conditions:
Column: SPD-1 or RTX-1
Carrier Gas: helium
Make-up Gas: nitrogen
Split Ratio: 100:1
Oven Initial: 280°C
Oven Final: 280°C
Detector: FID, 320 °C

Linear Velocity: 20cm/sec
Flow Rate: 40ml/min
Vent Flow: 70ml/min
Program Rate: isothermal
Hold Time:
Injector: 300°C

Elution Order	Carbon Number	Component Name	% Conc. by weight
1	C14:0	Methyl 2-hydroxytetracosanoate	20.0
2	C16:0	Methyl 2-hydroxyhexadecanoate	20.0
3	C18:0	Methyl 2-hydroxyoctadecanoate	15.0
4	C20:0	Methyl 2-hydroxyeicosanoate	15.0
5	C22:0	Methyl 2-hydroxydocosanoate	10.0
6	C23:0	Methyl 2-hydroxytricosanoate	10.0
7	C24:0	Methyl 2-hydroxytetracosanoate	10.0

Composition in weight percent determined by synthesis, not by analysis.

Application Notes:

This fatty acid mixture contains common *alpha*-hydroxy fatty acids in methylene chloride for the quantitative 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.Zhang, S. White, and C. Rock "Inhibiting Bacterial Fatty Acid Synthesis" *The Journal of Biological Chemistry,* Vol. 281(26) 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*