PRODUCT DATA SHEET

Non-Volatile Acid Mixture (qualitative)

Catalog No: 1077
Solvent: DI Water
Storage: 4-8°C
Concentration: various
Quantity: 100ml

GC Conditions:
Column: Supelcowax 10 30m x 0.53mm
Carrier Gas: helium
Make-up Gas: nitrogen
Split Ratio: 100:1
Oven Initial: 80°C
Oven Final: 160°C
Detector: FID, 200 °C

Linear Velocity: 20cm/sec
Flow Rate: 40ml/min
Vent Flow: 70ml/min
Program Rate: 4°C/min
Hold Time: 4 min
Injector: 150°C

Components:
Pyruvic acid
Lactic acid
Oxalacetic acid
Oxalic acid
Methyl malonic acid
Fumaric acid
Succinic acid

Application Notes:
This mixture contains several non-volatile fatty acids and is ideal for their identification by gas chromatography, mass spectrometry, and high performance liquid chromatography and is prepared from high purity stock materials. Knowledge of the fatty acid content of bacteria can be of great benefit in understanding microbials and can be of great nutritional importance in animals and humans.[1,2,3] This is a qualitative mixture and should not be used for quantitative purposes.

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 et al. "A rapid method for the determination of bacterial fatty acid composition" *Applied Microbiology,* Vol. 3(17) pp. 126, *1993*

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