

Application Note No. 061

Automated Determination of Fatty Acid Methyl Ester and Cis/Trans-Methyl Ester Composition of Fats and Oils

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- Fully automated sample preparation and injection
- 24 hour, unattended operation

Instrumentation

- Optic 2-200 programmable injector
- Focus sample preparation robot
- Agilent 6890 GC-FID
- CP-Sil 88 capillary column; 100 m x 0.25 mm i.d. x 0.4 μm film thickness

Procedure

- Lipid samples are weighed into autosampler vials and loaded into the Focus sample tray
- Focus adds n-heptane to each vial and shakes the vial to dissolve the lipid in the solvent
- Focus adds sodium methanolate to the vial and shakes the vial
- The sample is allowed to settle
- Focus injects a portion of the clear layer into the GC

Chromatograms

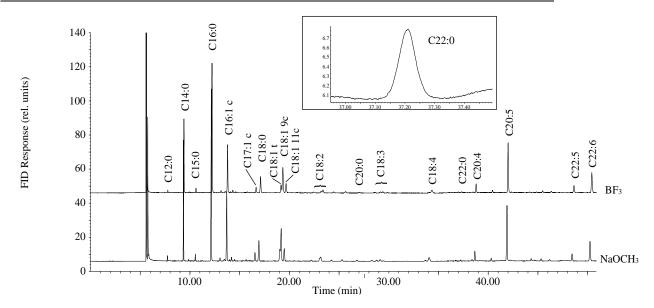


Figure: GC/FID chromatograms of fat CTME analysis. Upper trace: FAMEs prepared by the manual BF₃ method. Lower trace: FAMEs prepared by the automated NaOCH₃ method. The insert is of the C22:0 peak of the NaOCH₃ prepared sample

For more information please contact us at one of the addresses below.