

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*

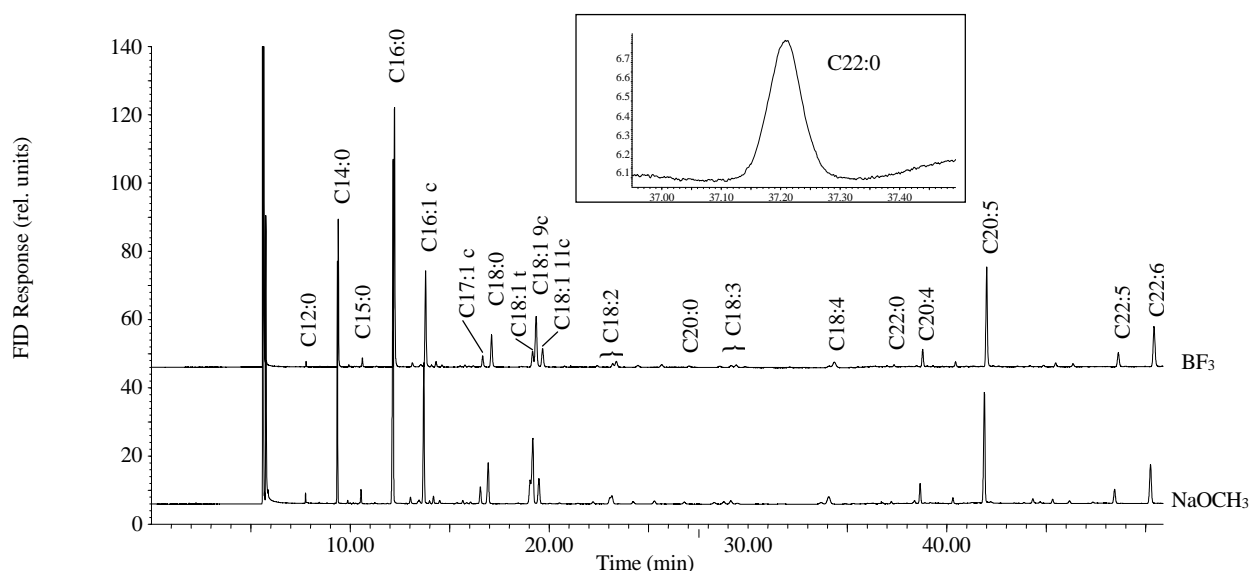
### Instrumentation

- 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  $\text{BF}_3$  method. Lower trace: FAMES prepared by the automated  $\text{NaOCH}_3$  method. The insert is of the  $\text{C}_{22:0}$  peak of the  $\text{NaOCH}_3$  prepared sample

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