SHIMADZU
Excellence in Science

Fully Automated FAME Analysis For Fatty Acid Profiling

Efficient, Reproducible Profiling Of Fatty Acid Methyl Esters In A Single Click

Fatty acid profiling by GC-MS requires converting oils to fatty acid methyl esters (FAME) — conventionally a laborious, waste-heavy, and manual process.

The AOC-6000 Plus transforms this workflow by fully automating hydrolysis, esterification, extraction, and injection. With every sample freshly prepared in an identical, automated sequence on the GCMS-QP2020 NX, it effectively eliminates human error, reduces chemical waste, and ensures highly reproducible profiles you can rely on for nutrition labeling, authenticity verification, and strict compliance testing.

Key Advantages Of Shimadzu's Walkaway Automation

Automate Away The Tedious & Laborious Steps

Free up valuable man-hours and eliminate operator-to-operator variability.

- Automates hydrolysis, esterification, extraction & injection
- No programming — intuitive PAL Method Composer
- Every sample freshly prepared, identically handled for excellent reproducibility

Greener, Leaner Workflow For Sustainability

Reduce expenses (e.g., consumable costs) and waste without compromising data quality.

- Uses drastically less reagent compared to conventional AOAC 969.33
- Only 10 mg sample scale is required — enabling far less chemical waste
- Lower running cost and environmental footprint

Reliable, Reproducible Data In Every Run

Robust, repeatable FAME profiles you can trust for QC and regulatory reporting.

- Validated across 13 distinct oils — including palm, coconut, olive, mustard, canola
- MS detection adds spectral confirmation compared to flame ionization detector (FID)
- Supports authenticity, origin & trans-fat/erucic-acid checks