# **GC Application**

ID No.: **23926** 



## FAMEs In Regular Olive Oil by GC/FID on Zebron ZB-FAME (60 m)

Zebron ZB-FAME, GC Cap.Column 60m x 0.25mm x 0.2um, Ea

Proprietary Pesticides Phase Phase: **Dimensions:** 60 meters x 0.25 mm x 0.2 μm

Order No: 7KG-G033-10

100 °C for 2 min to 165 °C @ 10 °C/min to 200 °C @ 1.5 °C/min **Oven Profile:** 

to 280 °C @ 15 °C/min for 1 min

**Carrier Gas:** Constant Flow Helium, 1.2 mL/min Injection: Split 50.0000000000:1 0 μL @ 240°C

**Detection:** Refractive Index (260°C)

**Analyst Note:** Recommended Liner: Zebron PLUS Single Taper with Wool, 4 mm ID

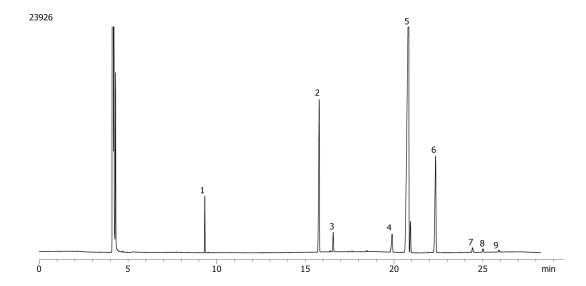
Liner Part No.: AG2-0A11-05 (for Agilent systems) Inlet Seal: AG0-8620 (Gold Plated Easy Seal) Septum: AG0-4696 (PhenoRed-400)

- Sample Preparation: 1. Strata $\otimes$  Si-1 Tube, 1 g/6 mL (Part No.: 8B-S012-JCH) on a vacuum or positive pressure manifold 2. Wash cartridge with 6 mL of hexane
- 3. Load oil solution (0.12 g of oil in 0.5 mL of hexane)
- 4. Elute with 10 mL of hexane/diethyl ether (87:13)
- 5. Evaporate eluate under a steady stream of nitrogen6. Dissolve purified oil residue in 1mL of heptane
- Add 0.1 mL of 2N potassium hydroxide in methanol to purified oil solution
- 8. Cap tube and shake vigorously for 15 seconds
- 9. Leave to separate until upper layer becomes clear
- 10. Extract upper layer for GC analysis



Products used in this application:





## **ANALYTES:**

- 1 C11:0 (I.S.)
- 2 C16:0
- 3 C16:1 cis 9
- C18:0
- C18:1 cis 9
- C18:2 cis 9,12
- C18:3 cis 9,12,15
- C20:0
- 9 C20:1 cis 11 ©2025 Phenomenex Inc. All rights reserved.

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# **Sample Preparation Details**

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## FAMEs In Regular Olive Oil by GC/FID on Zebron ZB-FAME (60 m)

#### **PRODUCT DESCRIPTION:**

Strata® SI-1 Silica (55 µm, 70 Å), 1 g / 6 mL, Tubes , 30/Pk

Inject: 0 µL on HPLC Refractive Index @ 0.0000000000 (260°C)

0

0

Order No.: 8B-S012-JCH

### **SOLID PHASE EXTRACTION (SPE) PRODCEDURE:**

**Note:** The solvent volumes shown below are for a 1 g bed mass.

The solvent volumes will need to be adjusted for a smaller or larger bed mass.

Condition:	-
Load:	-
Wash:	_
Dry:	-
Elute:	-
Final Prep and Analysis:	_
To reconstituted sample, add 0.1 mL of 2 N Potssium hydroxide in methanol. Cap to vigorously for 15 seconds. Leave to separate until upper layer becomes clear. Extra	

Spiked Conc. %RSC **ANALYTES:** Log P pKa % Rec (ng/mL) (n=0)1 C11:0 (I.S.) 0 2 C16:0 0 3 C16:1 cis 9 0 0 4 C18:0 **5** C18:1 cis 9 0 **6** C18:2 cis 9,12 0 C18:3 cis 9,12,15 0

This method is designed as a convenient starting point for further investigation and can be tailored to meet your extraction goals. Call your local Phenomenex Representative for assistance in method development and optimization techniques.

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C20:0 9 C20:1 cis 11

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