Analyze FAMEs and fatty acids on a single column

NEW Agilent DB-FATWAX Ultra Inert GC columns

Superior inertness for the challenging separation of fatty acids, and engineered for enhanced selectivity of fatty acid methyl esters
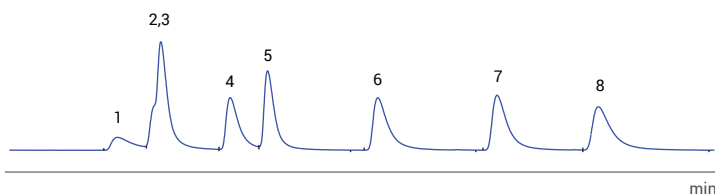
DB-FATWAX Ultra Inert (UI) is an application-specific WAX-type GC column ideal for the analysis of unsaturated and polyunsaturated fatty acid methyl esters (FAMEs) commonly found in fish oil and animal fat such as the Omega 3 and Omega 6 FAMEs. Due to the superior inertness and thermal stability of Agilent's proprietary ultra-inert technology, DB-FATWAX UI is also an ideal column choice for the analysis of challenging underivatized fatty acids.
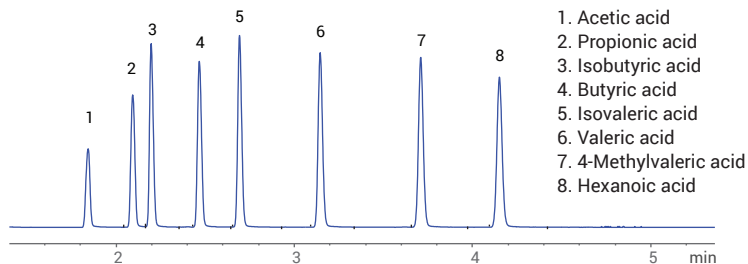
Features:

- Individual testing with a FAME mixture to ensure reproducible FAME equivalent chain length (ECL) values
- Reliable column-to-column inertness performance
- Improved peak shape for challenging polar compounds, such as free fatty acids
- Polar phase; equivalent to USP G16
- Bonded and cross-linked phase is solvent rinseable, and tolerates aqueous injections

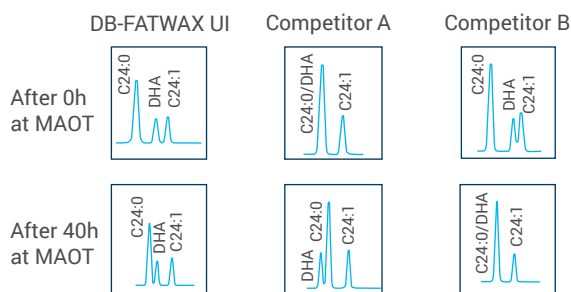### Superior inertness for analysis of underivatized free fatty acids

Competitor WAX column

DB-FATWAX Ultra Inert column

1. Acetic acid
2. Propionic acid
3. Isobutyric acid
4. Butyric acid
5. Isovaleric acid
6. Valeric acid
7. 4-Methylvaleric acid
8. Hexanoic acid

Unique selectivity and thermal robustness for separation of FAMEs

<div style="text-align: right">Agilent
Trusted Answers</div>

Select the right column for your samples

Fatty Acids and FAMEs	FAMEs			Triglycerides
DB-FATWAX Ultra Inert	**DB-23**	**CP-Sil 88 for FAME/HP-88**	**Select FAME**	**CP-TAP CB/ChromSpher Lipids (LC)**
• Free fatty acids, C4-C16 • Nutritional labeling FAMEs • Omega 3 and Omega 6 analysis • Chain length/degree of unsaturation • Superior inertness for difficult samples (i.e. food matrix)	• Fast separation of cis/trans isomers • Most nutritional labeling FAMEs resolved in under 8 min. • Lower cyanopropyl content than CP-Sil 88/HP-88 phases	• Highly detailed analysis of positional cis/trans FAMEs • As proposed in AOAC 996.06 and AOCS CE 1j-07 methods • Ideal for CLA FAMEs and partially hydrogenated vegetable oils	• Good choice for positional cis/trans FAMEs • Alternative options to CP-Sil 88 for FAME/HP-88 selectivities	• Mono-, di-, and triglyceride analysis • Complementary techniques for enhanced selectivity for isomeric triglycerides • Ideal for high-temperature applications

Column Selection by Type of Fatty Acid

Type of Fatty Acid	CP-FFAP CB	DB-FATWAX UI	DB-23	CP-Sil 88 for FAME/HP-88	Select FAME	CP-TAP CB for Triglycerides	ChromSpher Lipids (LC)
Short Chain Free Fatty Acids (C2-C6)	●	●					
Medium Chain Free Fatty Acids (C6-C16)	●	●					
Long Chain Free Fatty Acids (C16-C24)	●						
Omega 3 & 6 FAMEs		●	●	●	●		
FAMEs by degree of saturation		●					
FAMEs groups of cis and trans isomers			●	●	●		
FAMEs geometrical positional isomers				●	●		
Cholesterol and triglycerides						●	●

Column Selection by Type of Food

Type of Food	CP-FFAP CB	DB-FATWAX UI	DB-23	CP-Sil 88 for FAME/HP-88	Select FAME	CP-TAP CB for Triglycerides	ChromSpher Lipids (LC)
Dairy products (e.g.: milk, butter, cheese)	●	●	●	●	●	●	●
Fish oil		●	●	●	●	●	●
Animal fat	●	●	●	●	●	●	●
Omega 3 & 6		●	●	●	●		
Vegetable oils (Canola, Soybean, Olive, Palm, Corn)			●	●	●	●	●
Refined (hydrogenated) oils – e.g. deep-fried foods, baked goods				●	●		
Margarines and shortenings				●	●	●	●

🟨 Faster   🟩 Slower

Learn how the Agilent DB-FATWAX Ultra Inert column efficiently separates challenging Fatty Acids and FAMEs.
www.agilent.com/chem/fatwax-ui

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