

APPLICATION



37 FAMES In Under 25 Minutes by GC/FID Using Zebron™ ZB-FAME

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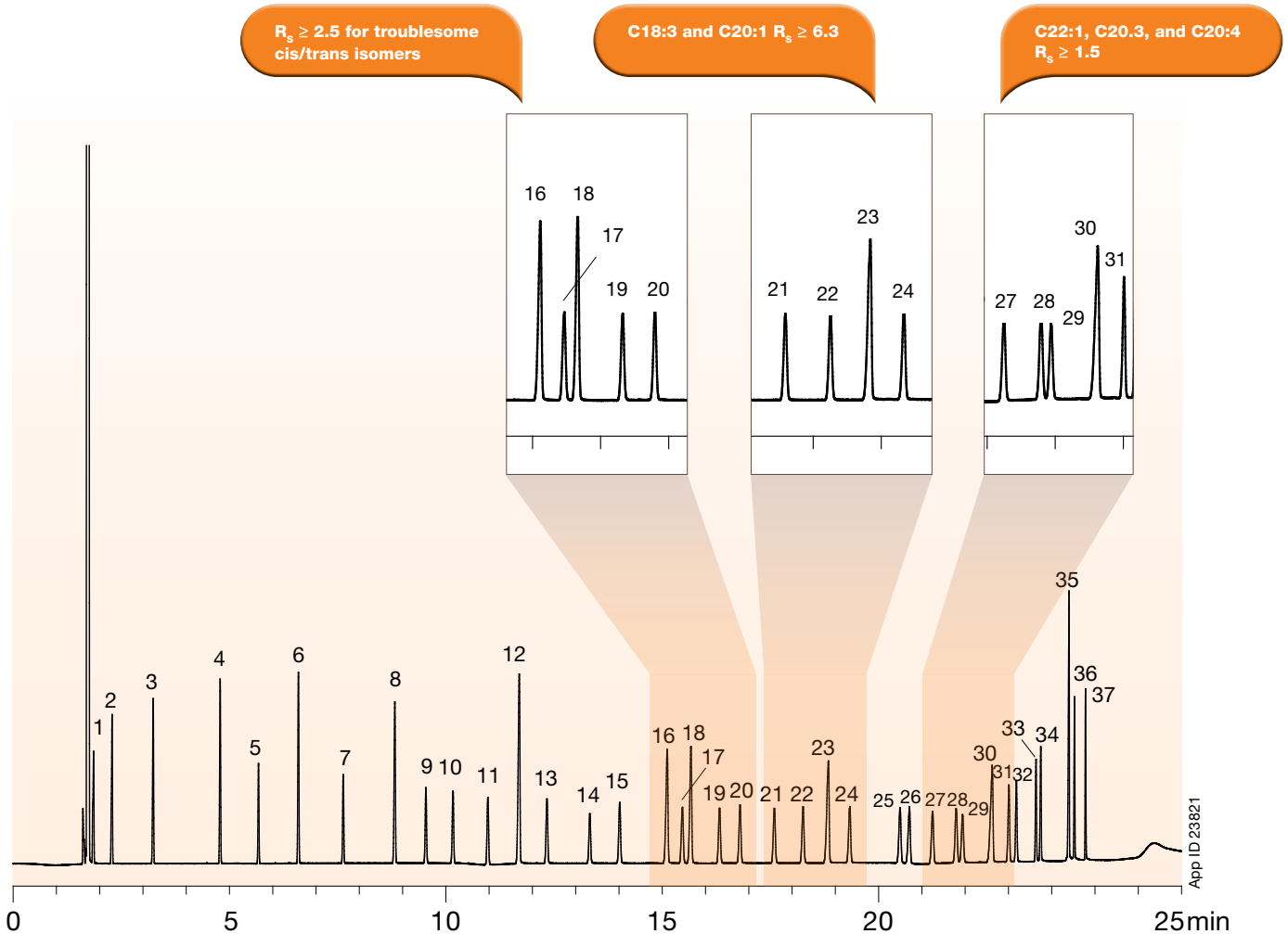
Overview

Regulatory methods for food testing require separation of specific cis/trans fatty acid isomers when determining fatty acid composition by GC/FID. The below method completely resolves AOAC critical pairs and reduces traditional run times to under 25 minutes using a short Zebron ZB-FAME GC column.

GC Conditions

Column: Zebron ZB-FAME
Dimensions: 30 meter x 0.25 mm x 0.20 μm
Part No.: 7HG-G033-10
Injection: Split 50:1 @ 240 °C, 1 μL
Carrier Gas: Helium @ 1.2 mL/min (constant flow)
Oven Program: 100 °C for 2 min to 140 °C @ 10 °C/min to 190 °C @ 3 °C/min to 260 °C @ 30 °C/min for 2 min
Detector: FID @ 260 °C
Recommended Liner: Zebron PLUS Single Taper with Wool
Liner Part No.: AG2-0A11-05 (for Agilent® systems)

1. C4:0	14. C17:0	27. C20:3 cis 8,11,14
2. C6:0	15. C17:1 cis 10	28. C20:4 cis 5,8,11,14
3. C8:0	16. C18:0	29. C20:3 cis 11,14,17
4. C10:0	17. C18:1 trans 9	30. C22:0
5. C11:0	18. C18:1 cis 9	31. C22:1 cis 13
6. C12:0	19. C18:2 trans 9,12	32. C20:5 cis 5,8,11,14,17
7. C13:0	20. C18:2 cis 9,12	33. C22:2 cis 13,16
8. C14:0	21. C18:3 cis 6,9,12	34. C23:0
9. C14:1 cis 9	22. C18:3 cis 9,12,15	35. C24:0
10. C15:0	23. C20:0	36. C24:1 cis 15
11. C15:1 cis 10	24. C20:1 cis 11	37. C22:6 cis 4,7,10,13,16,19
12. C16:0	25. C20:2 cis 11,14	
13. C16:1 cis 9	26. C21:0	



App ID 23821




Ordering Information

Zebron™ ZB-FAME GC Columns

Length (m)	ID (mm)	Film (µm)	Temp Limits (°C)	Part No.	5m Guardian™ Part No.
20	0.18	0.15	-60 to 280	7FD-G033-05	—
30	0.25	0.20	-60 to 280	7HG-G033-10	7HG-G033-10-GGA
60	0.25	0.20	-60 to 280	7KG-G033-10	—

Zebron PLUS GC Inlet Liners

Description	Dimensions ID x L (mm)	Part No.	Unit.
For Agilent® or Thermo Scientific® GC Systems			
Single Taper with Wool	4 x 78.5	AG2-0A11-05	5/pk
		AG2-0A11-25	25/pk

Find more Zebron GC columns and accessories at
www.phenomenex.com/GC

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