

# Zebbron Essentials for FAMEs

Smart Alternatives for the FAMEs Traditionalist

- ZB-88
- ZB-23



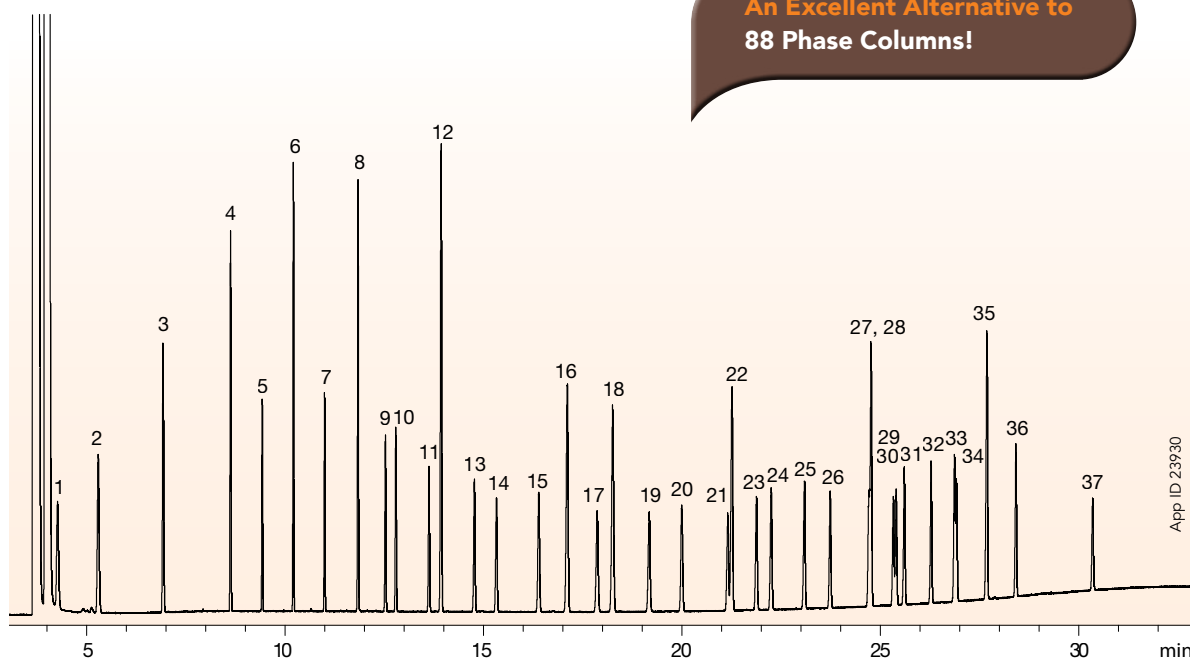
# Zebtron™ ZB-88

For Olive Oil and Hydrogenated Oil Analysis

- Recommended alternative to Supelco® SP™-2560, Agilent® CP-Sil 88, Agilent HP-88, and Restek® Rt®-2560
- Traditional separation of cis/trans FAMES



## 37 FAME Mix



**Make the Switch and SAVE!**

**Zebtron  
ZB-88**

vs.

**Agilent  
CP-Sil 88**

100 meter x 0.25 mm x 0.20 µm

**Column:** Zebtron ZB-88

**Dimensions:** 100 meter x 0.25 mm x 0.20 µm

**Part Number:** 7MG-G037-10

**Injection:** Split 50:1 @ 250°C, 1 µL

**Carrier Gas:** Hydrogen @ 2 mL/min (constant flow)

**Oven Program:** 120°C for 1 min to 175°C @ 10°C/min for 10 min to 210°C @ 5°C/min for 5 min to 230°C @ 5°C/min for 5 min

**Detector:** FID @ 280°C

**Sample:**

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

### Ordering Information

#### Zebtron ZB-88 GC Columns

Length (m)	ID (mm)	df (µm)	Temp. Limits °C	Part No.
30	0.25	0.20	0 to 250/260	7HG-G037-10
60	0.25	0.20	0 to 250/260	7KG-G037-10
100	0.25	0.20	0 to 250/260	7MG-G037-10

**guarantee**

If Zebtron GC columns do not provide you with at least equivalent separations to a competing column of the same phase, particle size, and dimensions, return the column with comparative data within 45 days for a FULL REFUND.

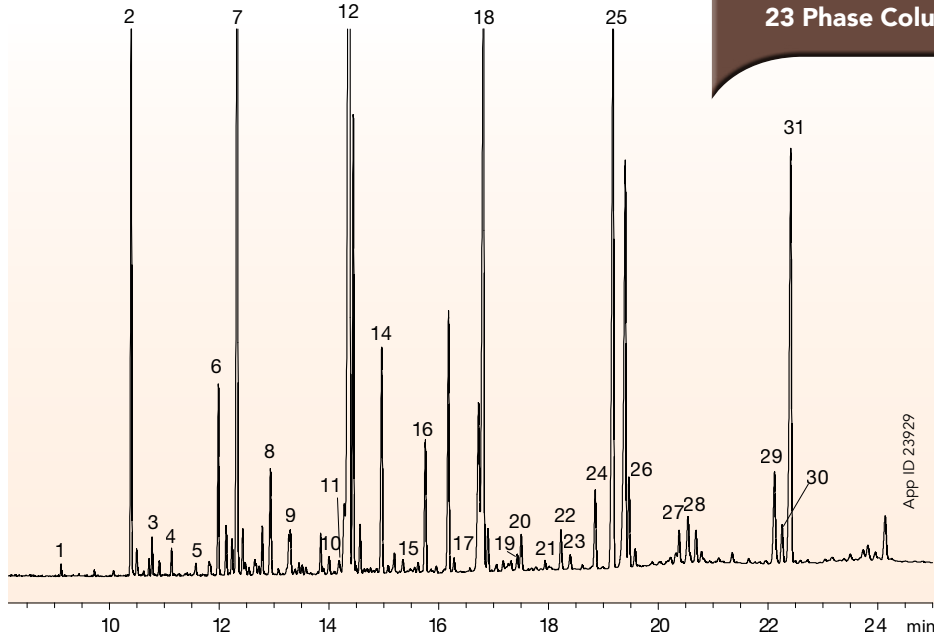
# Zebtron™ ZB-23

For Omega-3 Fatty Acids and Fish Oil Testing

- Recommended alternative to Supelco® SP™-2330, Agilent® DB®-23, and Restek® Rtx®-2330
- Alternate selectivity well suited for marine oils



## Unsaturated Fatty Acids from Marine Oil



An Excellent Alternative to 23 Phase Columns!

Make the Switch and SAVE!

Zebtron ZB-23
 vs.
 Supelco SP-2330
 vs.
 Restek Rtx-2330

60 meter x 0.25 mm x 0.20 μm  
(60 meter x 0.25 mm x 0.25 μm for Zebtron ZB-23)

**Column:** Zebtron ZB-23  
**Dimensions:** 60 meter x 0.25 mm x 0.15 μm  
**Part No.:** 7KG-G039-05  
**Injection:** Split 50:1 @ 250°C, 1 μL  
**Carrier Gas:** Helium @ 33cm/s @ 50°C (constant flow)  
**Oven Program:** 50°C for 1 min to 175°C @ 25°C/min to 230°C @ 4°C/min for 5 min  
**Detector:** FID @ 280°C

**Sample:**

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

### Ordering Information

Zebtron ZB-23 GC Columns				
Length (m)	ID (mm)	df (μm)	Temp. Limits °C	Part No.
15	0.25	0.25	40 to 250/260	7EG-G039-11
15	0.53**	0.50	40 to 230/240	7EK-G039-17
20	0.18	0.20	40 to 250/260	7FD-G039-10
30	0.25	0.15	40 to 250/260	7HG-G039-05
30	0.25	0.25	40 to 250/260	7HG-G039-11
30	0.32	0.25	40 to 250/260	7HM-G039-11
30	0.53**	0.50	40 to 230/240	7HK-G039-17
60	0.25	0.15	40 to 250/260	7KG-G039-05
60	0.25	0.25	40 to 250/260	7KG-G039-11
60	0.32	0.25	40 to 250/260	7KM-G039-11

\*\* 0.53 mm ID columns are rated to 230/240 °C max operational temperature.



## Zebtron Essentials for FAMEs

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