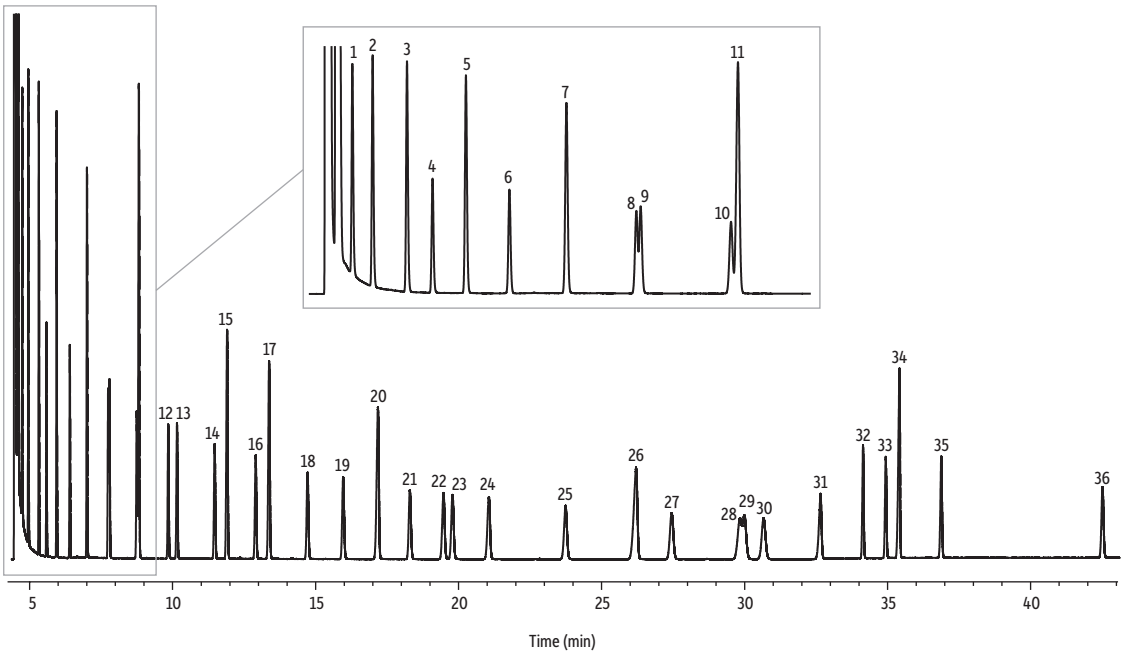
Food Industry FAMEs on Rt-2560 by AOCS Method Ce-1j-07 using H_2 (Original Method)



GC_FF1347

Peaks	t_R (min)	Conc. (µg/mL)	Structural Nomenclature
1. Methyl caproate	4.741	400	C6:0
2. Methyl octanoate	4.954	400	C8:0
3. Methyl decanoate	5.319	400	C10:0
4. Methyl undecanoate	5.589	200	C11:0
5. Methyl dodecanoate	5.942	400	C12:0
6. Methyl tridecanoate	6.403	200	C13:0
7. Methyl myristate	7.005	400	C14:0
8. Methyl myristoleate	7.744	200	C14:1 (c9)
9. Methyl pentadecanoate	7.790	200	C15:0
10. Methyl pentadecenoate	8.745	200	C15:1 (C10)
11. Methyl palmitate	8.818	600	C16:0
12. Methyl palmitoleate	9.846	200	C16:1 (c9)
13. Methyl heptadecanoate	10.153	200	C17:0
14. Methyl heptadecenoate	11.469	200	C17:1 (c10)
15. Methyl stearate	11.905	400	C18:0
16. Methyl octadecenoate	12.903	200	C18:1 (t9)
17. Methyl oleate	13.372	400	C18:1 (c9)
18. Methyl linolelaidate	14.718	200	C18:2 (t9,t12)
19. Methyl linoleate	15.963	200	C18:2 (c9,c12)
20. Methyl arachidate	17.176	400	C20:0
21. Methyl linolenate	18.295	200	C18:3 (c6,c9,c12)
22. Methyl eicosenoate	19.470	200	C20:1 (c11)
23. Methyl linolenate	19.787	200	C18:3 (c9,c12,c15)
24. Methyl heneicosanoate	21.060	200	C21:0
25. Methyl eicosadienoate	23.742	200	C20:2 (c11,c14)
26. Methyl behenate	26.204	400	C22:0
27. Methyl eicosatrienoate	27.448	200	C20:3 (c8,c11,c14)
28. Methyl erucate	29.836	200	C22:1 (c13)
29. Methyl eicosatrienoate	29.996	200	C20:3 (c11,c14,c17)
30. Methyl arachidonate	30.667	200	C20:4 (c5,c8,c11,c14)
31. Methyl tricosanoate	32.652	200	C23:0
32. Methyl docosadienoate	34.142	200	C22:2 (c13,c16)
33. Methyl eicosapentaenoate	34.934	200	C20:5 (c5,c8,c11,c14,c17)
34. Methyl lignocerate	35.417	400	C24:0
35. Methyl nervonate	36.878	200	C24:1 (c15)
36. Methyl docosahexaenoate	42.513	200	C22:6 (c4,c7,c10,c13,c16,c19)

Column	Rt-2560, 100 m, 0.25 mm ID, 0.20 µm (cat.# 13198)
Sample	Food industry FAME mix (cat.# 35077)
Diluent:	Hexane
Conc.:	10,000 µg/mL total concentration
Injection	
Inj. Vol.:	1 µL split (split ratio 20:1)
Liner:	Topaz 4.0 mm ID Precision inlet liner w/wool (cat.# 23305)
Inj. Temp.:	250 °C
Oven	
Oven Temp.:	180 °C (hold 32 min) to 215 °C at 20 °C/min (hold 30.25 min)
Carrier Gas	H_2, constant flow
Flow Rate:	2.5 mL/min
Detector	FID @ 250 °C
Constant Column + Constant Make-up:	52 mL/min
Hydrogen flow:	40 mL/min
Air flow:	400 mL/min
Data Rate:	50 Hz
Instrument	Agilent 7890A GC
Notes	Hydrogen flow optimized to achieve effective linear velocity (www.restek.com/FAMEH2). C4:0 Methyl butyrate (623-42-7) elutes in the solvent front. Resolution of critical pair *cis*-11-C20:1 (#22) and *cis*-9,12,15-C18:3 (#23) is 2.03.