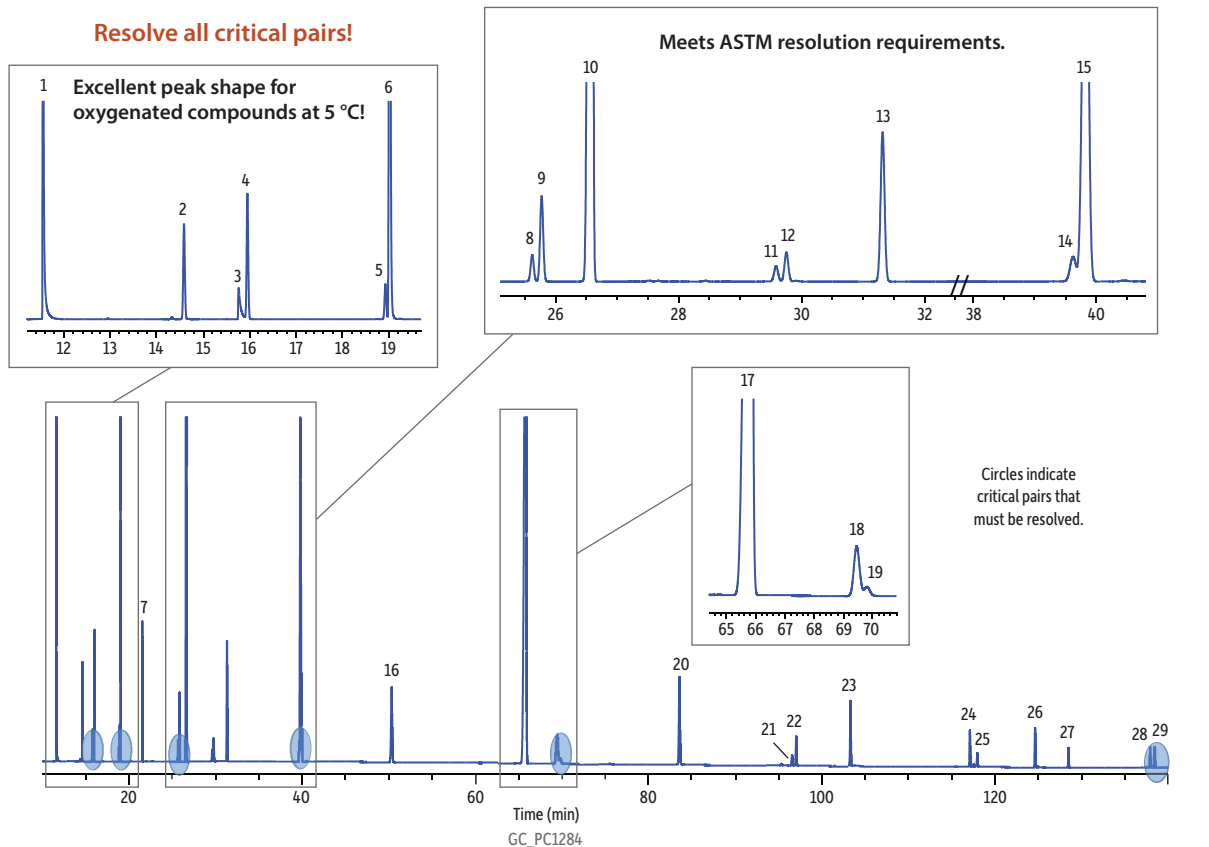


Detailed Hydrocarbon Analysis (DHA) on Rtx-DHA-100



Column Rtx-DHA-100, 100 m, 0.25 mm ID, 0.50 μ m (cat.# 10148) using Rtx-5 DHA tuning column 2-5 m, 0.25 mm ID (cat.# 10165) with universal Press-Tight connectors (cat.# 20429) Oxy setup blend (cat.# 33034)

Sample Injection
 Inj. Vol.: 0.1 μ L split (split ratio 150:1)
 Liner: Premium 4 mm Precision liner w/wool (cat.# 23305)
 Inj. Temp.: 250 °C

Oven
 Oven Temp.: 5 °C (hold 10 min) to 49 °C at 5 °C/min (hold 50 min) to 200 °C at 1.5 °C/min (hold 10 min)

Carrier Gas
 He, constant flow

Flow Rate: 2.2 mL/min

Detector
 FID @ 275 °C

Make-up Gas
 Flow Rate: 30 mL/min

Make-up Gas
 Type: N₂

Hydrogen flow: 40 mL/min

Air flow: 368 mL/min

Instrument
 Agilent 7890B GC

Notes
 Restek's Rtx-DHA-100 column has the required selectivity to deliver adequate resolution between the critical pairs in ASTM Method D6730. Excellent column inertness provides peak shapes for oxygenated compounds that meet or exceed ASTM method criteria.

Peaks

1. Ethanol
2. C5 (*n*-pentane)
3. *tert*-Butanol
4. 2-Methylbutene-2
5. 2,3-Dimethylbutane
6. Methyl *tert*-butyl ether (MTBE)
7. C6 (*n*-hexane)
8. 1-Methylcyclopentene
9. Benzene
10. Cyclohexane
11. 3-Ethylpentane
12. *trans*-1,2-Dimethylcyclopentane
13. *CT* (*n*-heptane)
14. 2,3,3-Trimethylpentane
15. Toluene
16. C8 (*n*-octane)
17. Ethylbenzene
18. *p*-Xylene
19. 2,3-Dimethylheptane
20. C9 (*n*-nonane)
21. 5-Methylnonane
22. 1-Methyl-2-ethylbenzene
23. C10 (*n*-decane)
24. C11 (undecane)
25. 1,2,3,5-Tetramethylbenzene
26. Naphthalene
27. C12 (dodecane)
28. 1-Methylnaphthalene
29. C13 (tridecane)

Chromatogram was obtained using 2.5 m of Rtx-5 DHA tuning column.