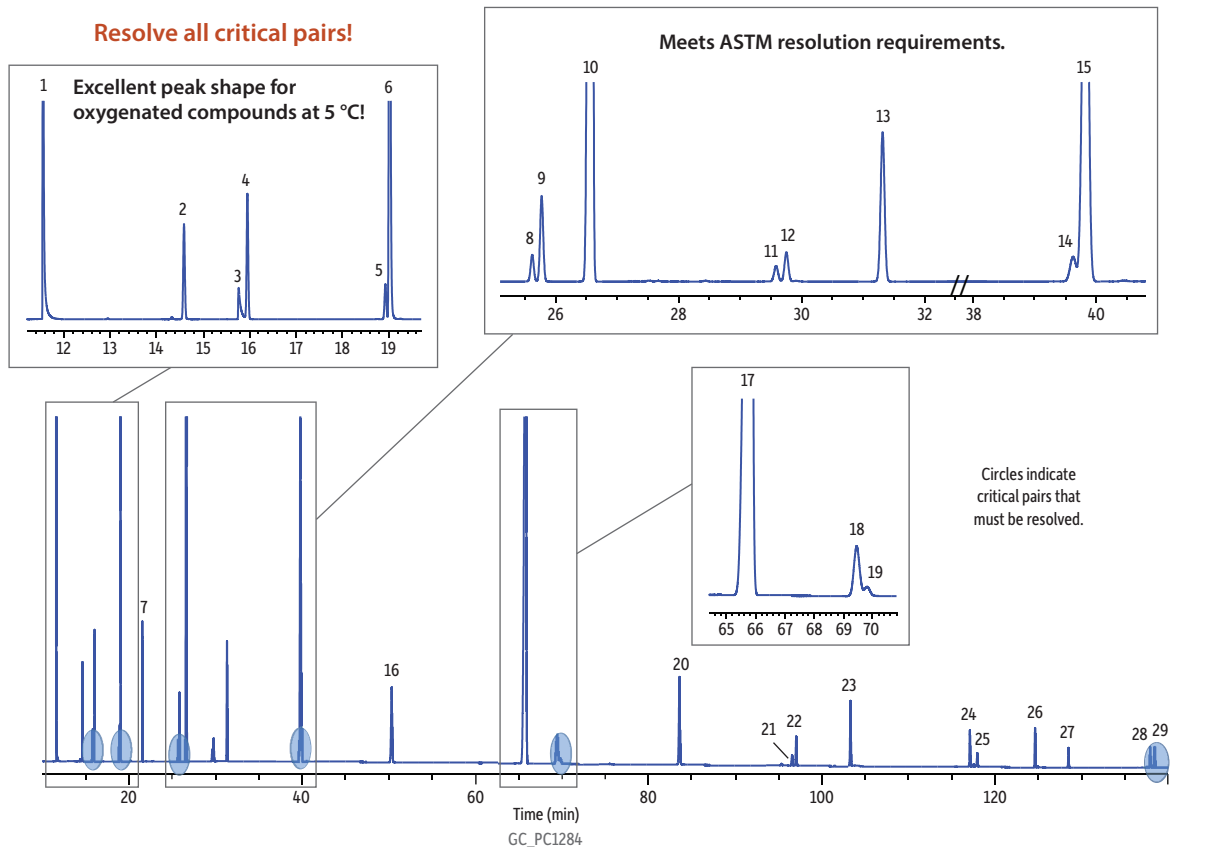


Detailed Hydrocarbon Analysis (DHA) on Rtx-DHA-100



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.# 23305.1)
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 | 16. C8 (<i>n</i> -octane) |
| 2. C5 (<i>n</i> -pentane) | 17. Ethylbenzene |
| 3. <i>tert</i> -Butanol | 18. <i>p</i> -Xylene |
| 4. 2-Methylbutene-2 | 19. 2,3-Dimethylheptane |
| 5. 2,3-Dimethylbutane | 20. C9 (<i>n</i> -nonane) |
| 6. Methyl <i>tert</i> -butyl ether (MTBE) | 21. 5-Methylnonane |
| 7. C6 (<i>n</i> -hexane) | 22. 1-Methyl-2-ethylbenzene |
| 8. 1-Methylcyclopentene | 23. C10 (<i>n</i> -decane) |
| 9. Benzene | 24. C11 (undecane) |
| 10. Cyclohexane | 25. 1,2,3,5-Tetramethylbenzene |
| 11. 3-Ethylpentane | 26. Naphthalene |
| 12. <i>trans</i> -1,2-Dimethylcyclopentane | 27. C12 (dodecane) |
| 13. <i>CT</i> (<i>n</i> -heptane) | 28. 1-Methylnaphthalene |
| 14. 2,3,3-Trimethylpentane | 29. C13 (tridecane) |
| 15. Toluene | |

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