EPA and EU Phthalates on Rxi®-XLB

Peaks
1. Dimethyl phthalate
2. Diethyl phthalate
3. Benzyl benzoate
4. Diisobutyl phthalate
5. Di-n-butyl phthalate
6. Bis(2-methoxyethyl) phthalate
7. Bis[4-methyl-2-pentyl] phthalate isomer 1
8. Bis[4-methyl-2-pentyl] phthalate isomer 2
9. Bis(2-ethoxyethyl) phthalate
10. Di-n-pentyl phthalate
11. Di-n-hexyl phthalate
12. Butyl benzyl phthalate
13. Hexyl-2-ethylhexyl phthalate
14. Bis(2-butoxyethyl) phthalate
15. Bis(2-ethylhexyl) phthalate
16. Diocyclohexyl phthalate
17. Di-n-octyl phthalate
18. Diisononyl phthalate
19. Dinonyl phthalate
20. Dinonyl phthalate

Column
Rxi®-XLB, 30 m, 0.25 mm ID, 0.25 µm (cat.# 13723)

Sample
Benzyl benzoate (cat.# 31847)
EPA Method 8061A phthalate esters mixture (cat.# 33227)

Diluent:
Methylene chloride
Conc.:
50.0 µg/mL (80 µg/mL for internal standard benzyl benzoate)

Injection
Inj. Vol.: 1 µL split (split ratio 20:1)
Liner:
Premium 3.5 mm Precision® liner w/wool (cat.# 23320.1)
Inj. Temp.: 280 °C
Split Vent Flow Rate: 3 mL/min

Oven
Oven Temp.: 200 °C (hold 0.5 min) to 330 °C at 10 °C/min (hold 1 min)
Carrier Gas:
He, constant linear velocity
Linear Velocity: 66.7 cm/sec, 39.5 psi, 272.3 kPa @ 200 °C
Detector:
MS
Mode: Scan

Transfer Line
Temp.: 300 °C
Analyzer Type:
Quadrupole
Source Temp.: 280 °C
Electron Energy: 70 eV
Solvent Delay Time: 0.9 min
Tune Type:
PFTBA
Ionization Mode:
EI
Instrument:
Shimadzu 2010 GC & QP2010+ MS
Notes:
The flow rate is 3 mL/min @ 200 °C. The MS scan interval is 0.1 sec.
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