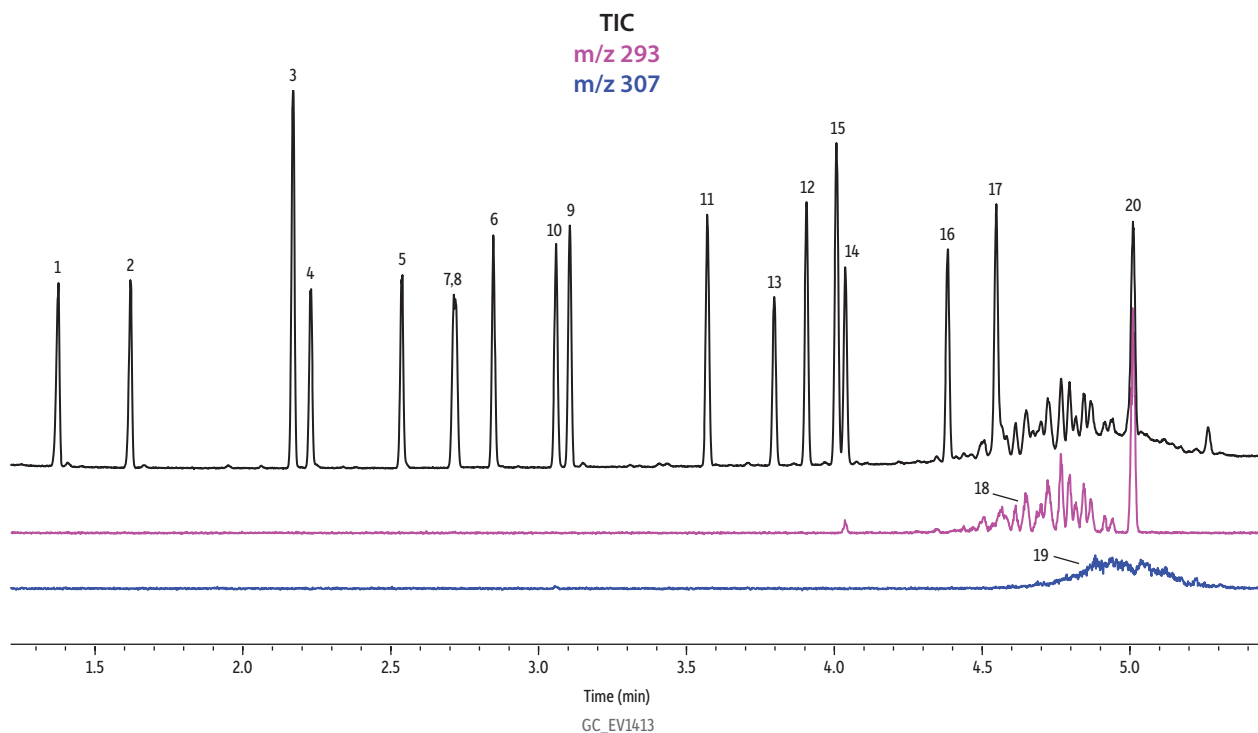


EPA and EU Phthalates on Rxi®-35SiI MS

- 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

- Peaks**
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. Dicyclohexyl phthalate
 17. Di-*n*-octyl phthalate
 18. Diisononyl phthalate
 19. Diisodecyl phthalate
 20. Dinonyl phthalate



Column Rxi®-35SiI MS, 30 m, 0.25 mm ID, 0.25 µm (cat.# 13823)
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 30 °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

Scan Program:

Group	Start Time (min)	Scan Range (amu)	Scan Rate (scans/sec)
1	0.9	59-400	-

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

Notes

Acknowledgement

Shimadzu 2010 GC & QP2010+ MS
 The flow rate is 3 mL/min @ 200 °C. The MS scan interval is 0.1 sec.
 The authors would like to thank Shimadzu Corporation for their consultation with the operation of the QP2010 Plus GC-MS instrument.