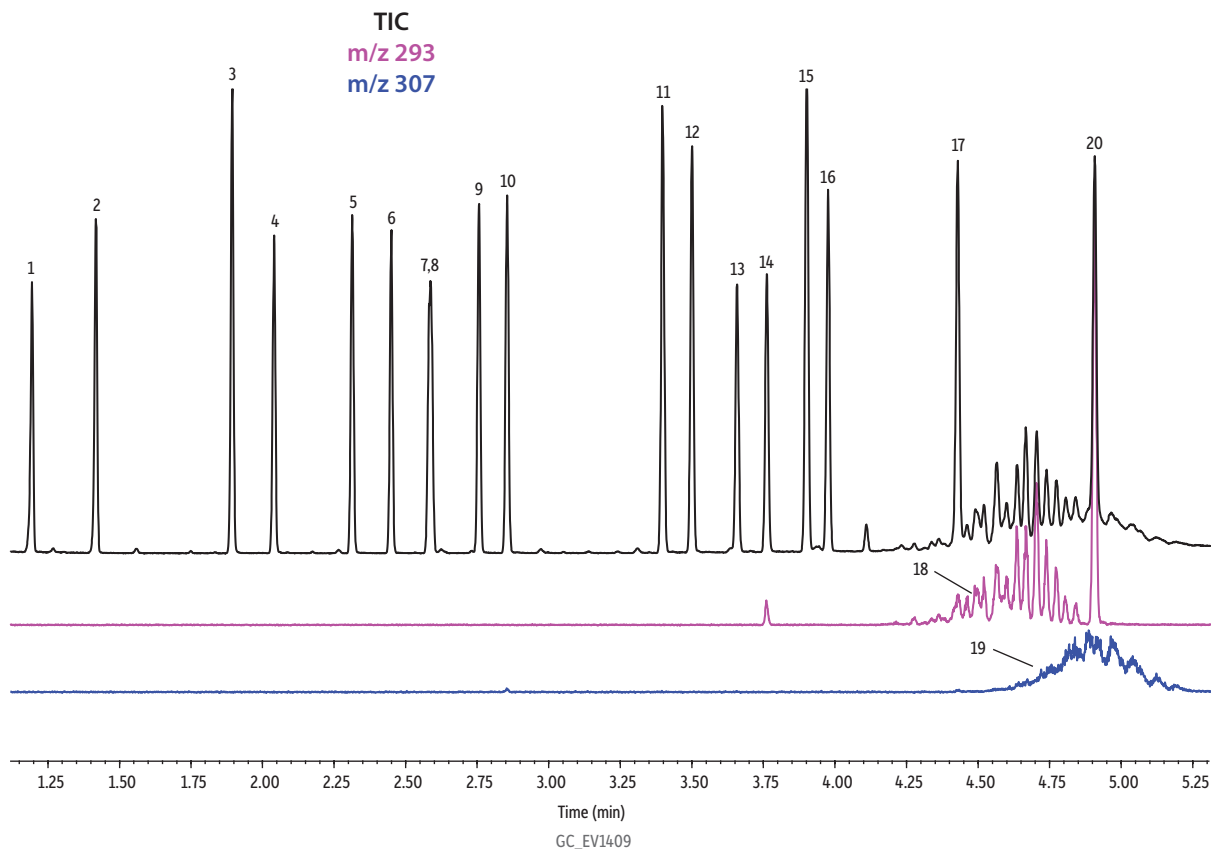


# EPA and EU Phthalates on Rxi®-XLB

- |   |  |
|---|--|
| <p><b>Peaks</b></p> <ol style="list-style-type: none"> <li>1. Dimethyl phthalate</li> <li>2. Diethyl phthalate</li> <li>3. Benzyl benzoate</li> <li>4. Diisobutyl phthalate</li> <li>5. Di-<i>n</i>-butyl phthalate</li> <li>6. Bis(2-methoxyethyl) phthalate</li> <li>7. Bis[4-methyl-2-pentyl] phthalate isomer 1</li> <li>8. Bis[4-methyl-2-pentyl] phthalate isomer 2</li> <li>9. Bis(2-ethoxyethyl) phthalate</li> <li>10. Di-<i>n</i>-pentyl phthalate</li> </ol> | <p><b>Peaks</b></p> <ol style="list-style-type: none"> <li>11. Di-<i>n</i>-hexyl phthalate</li> <li>12. Butyl benzyl phthalate</li> <li>13. Hexyl-2-ethylhexyl phthalate</li> <li>14. Bis(2-butoxyethyl) phthalate</li> <li>15. Bis(2-ethylhexyl) phthalate</li> <li>16. Dicyclohexyl phthalate</li> <li>17. Di-<i>n</i>-octyl phthalate</li> <li>18. Diisononyl phthalate</li> <li>19. Diisodecyl phthalate</li> <li>20. Dinonyl phthalate</li> </ol> |
|---|--|



**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)  
 Methylene chloride  
 Diluent: 50.0 µg/mL (80 µg/mL for internal standard benzyl benzoate)  
 Injection  
 Conc.:  
 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**  
 Linear Velocity: He, constant linear velocity  
 66.7 cm/sec, 39.5 psi, 272.3 kPa @ 200 °C  
**Detector**  
 Mode: MS  
 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: 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.  
**Acknowledgement**