### EPA and EU Phthalates on Rxi®-35Sil MS

<table>
<thead>
<tr>
<th>Peaks</th>
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</thead>
<tbody>
<tr>
<td>1. Dimethyl phthalate</td>
<td>11. Di-n-hexyl phthalate</td>
</tr>
<tr>
<td>2. Diethyl phthalate</td>
<td>12. Butyl benzyl phthalate</td>
</tr>
<tr>
<td>5. Di-n-butyl phthalate</td>
<td>15. Bis[2-ethylhexyl] phthalate</td>
</tr>
<tr>
<td>7. Bis[4-methyl-2-pentyl] phthalate isomer 1</td>
<td>17. Di-n-octyl phthalate</td>
</tr>
<tr>
<td>8. Bis[4-methyl-2-pentyl] phthalate isomer 2</td>
<td>18. Diisononyl phthalate</td>
</tr>
<tr>
<td>10. Di-n-pentyl phthalate</td>
<td>20. Dinonyl phthalate</td>
</tr>
</tbody>
</table>

**Column**
- Rxi®-35Sil 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
- 50.0 µg/mL (80 µg/mL for internal standard benzyl benzoate)

**Injection**
- Conc.:
- Injection: 1 µL split (split ratio 20:1)
- Liner: Premium 3.5 mm Precision® liner w/wool (cat.# 23320.1)
- 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: 1
- Start Time (min): 0.9
- Scan Range (amu): 59-400
- Scan Rate (scans/sec): -

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

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**TIC**
- m/z 293
- m/z 307

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**Acknowledgement**
- The authors would like to thank Shimadzu Corporation for their consultation with the operation of the QP2010 Plus GC-MS instrument.