ANALYTICAL REPORT

Methoxphenidine (C20H25NO)
1-[1-(2-methoxyphenyl)-2-phenylethyl]piperidine

Remark – other NPS detected: none

<table>
<thead>
<tr>
<th>Sample ID:</th>
<th>1239-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample description:</td>
<td>liquid - brown (oil)</td>
</tr>
<tr>
<td>Sample type:</td>
<td>RM-reference material</td>
</tr>
<tr>
<td>Comments¹:</td>
<td>Chiron AS Lot#14003 RESPONSE - purchasing</td>
</tr>
<tr>
<td>Date of entry:</td>
<td>8/31/2015</td>
</tr>
</tbody>
</table>

Substance identified-structure² (base form)

Systematic name: 1-[1-(2-methoxyphenyl)-2-phenylethyl]piperidine

Other names:

- Formula (per base form): C20H25NO
- $M_w$ (g/mol): 295.42
- Salt form: base
- StdInChIKey: QXXCUXIRBHSITD-UHFFFAOYSA-N
- Compound Class: Piperazine derivates
- Other NPS detected: none
- Add.info (purity..): 98%

¹ This report has been produced with the financial support of the Prevention of and fight against crime Programme of the European Union (grant agreement number JUST/2013/ISEC/DRUGS/AG/6413). The contents of this report are the sole responsibility of the National Forensic Laboratory and can in no way be taken to reflect the views of the European Commission.

² Created by OPSIN free tool: http://opsin.ch.cam.ac.uk/ DOI: 10.1021/ci100384d
Supporting information

<table>
<thead>
<tr>
<th>Analytical technique</th>
<th>applied</th>
<th>remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>GC-MS (EI ionization)</td>
<td>+</td>
<td>NFL GC-RT (min): 8.22 BP(1): 204; BP(2): 205, BP(3): 91,</td>
</tr>
<tr>
<td>FTIR-ATR</td>
<td>+</td>
<td>direct measurement</td>
</tr>
<tr>
<td>FTIR (condensed phase) always for the base form of cpd.</td>
<td>+</td>
<td></td>
</tr>
</tbody>
</table>

GC-MS (Agilent): GC-method is RT locked to tetracosane (RT=9.53 min). Injection volume 1 ml and split mode (1:50) for GC-MS instruments and 1:5 for GC-MS-FTIR (condensed phase). Injector temperature: 280 °C. Column: HP1-MS (100% dimethylpolysiloxane), length 30 m; internal diameter 0.25 mm; film thickness 0.25 mm. Carrier gas He: flow-rate 1.2 ml/min. GC oven program: 170 °C for 1 min, followed by heating up to 293 °C at a rate of 18 °C/min, hold for 6.1 min, than heating at 50 °C/min up to 325 °C and finally 2.8 min isothermal. MSD source EI = 70 eV. GC-MS transfer line T = 235 °C, source and quadrupole temperatures 280 °C and 180 °C. m/z scan range: from 50 (40) to 550 amu.

FTIR-ATR (Perkin Elmer): scan range 4000-400 cm⁻¹; resolution 4 cm⁻¹
FTIR (Spectra analyses-Danny): scan range 4000 to 7000, resolution 4 cm⁻¹

Abundance

Scan 559 (8.221 min): methoxphenidaine_ID1239-15.D\data.ms

m/z ->

MS-EI spectrum
FTIR-ATR direct measurement

Sample: Methoxphenidine 1239-15

FTIR condensed phase