**ANALYTICAL REPORT**

**2-DPMP (C18H21N)**

(RS)-2-benzhydrylpiperidine

**Remark – other NPS detected:** none

<table>
<thead>
<tr>
<th>Sample ID</th>
<th>1104-14A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample description</td>
<td>powder - white</td>
</tr>
<tr>
<td>Sample type</td>
<td>RM-reference material</td>
</tr>
<tr>
<td>Comments</td>
<td>Cayman Lot#0436289</td>
</tr>
<tr>
<td>Date of entry</td>
<td>9/22/2014</td>
</tr>
</tbody>
</table>

**Substance identified-structure** (base form)

![Chemical structure of 2-DPMP](image_url)

**Systematic name**

(RS)-2-benzhydrylpiperidine

**Other names**

2-DPMP

**Formula (per base form)**

C18H21N

**M<sub>w</sub> (g/mol)**

251.37

**Salt form**

HCl

**Smiles**

C(C1=CC=CC=C1)(C1=CC=CC=C1)C1NCCCC1

**Compound Class**

Piperidines & pyrrolidines

**Other NPS detected**

none

**Add.info (purity..)**

100%

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.
## Supporting information

<table>
<thead>
<tr>
<th>Analytical technique:</th>
<th>applied</th>
<th>remarks</th>
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<tbody>
<tr>
<td>GC-MS (EI ionization)</td>
<td>+</td>
<td>NFL GC-RT (min): 7,35 BP(1): 84; BP(2): 165, BP(3): 56,</td>
</tr>
<tr>
<td>FTIR-ATR</td>
<td>+</td>
<td>pending</td>
</tr>
<tr>
<td>FTIR (condensed phase) always as base form</td>
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<td></td>
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</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 4cm⁻¹

FTIR (Spectra analyses-Danny): scan range 4000 to 700, resolution 4cm⁻¹

### Figure 1: GC-MS spectrum

![GC-MS spectrum](image)
Figure 2: FTIR ATR

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