ANALYTICAL REPORT

DOF (C11H16FNO2)

2,5-Dimethoxy-4-fluoroamphetamine

Remark – other active cpd. detected: none

<table>
<thead>
<tr>
<th>Sample ID:</th>
<th>1413-15</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>Comments¹:</td>
<td>Chiron AS Lot#15332;</td>
</tr>
<tr>
<td>Date of entry:</td>
<td>1/5/2016</td>
</tr>
</tbody>
</table>

Systematic name: 2,5-Dimethoxy-4-fluoroamphetamine

Other names:

**Formula (per base form)**
C11H16FNO2

**M_w (g/mol)**
213.25

**Salt form:**
HCl

**StdInChIKey**
NRANUECGGQVXOT-UHFFFAOYSA-N

**Compound Class**
Phenethylamines

**Other active cpd. detected**
none

**Add.info (purity..)**
99.50%

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/](http://opsin.ch.cam.ac.uk/) DOI: 10.1021/ci100384d
Report updates

<table>
<thead>
<tr>
<th>date</th>
<th>comments (explanation)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Supporting information

Analytical technique: | applied | remarks |
---------------------|---------|---------|
GC-MS (EI ionization) | +       | NFL GC-RT (min): 4.04  
                       |         | BP(1): 44; BP(2): 170; BP(3): 155, |
FTIR-ATR | +       | direct measurement |
GC-IR (condensed phase) | +       |

**GC-MS (Agilent):**
GC-method is RT locked to tetracosane (RT=9.53 min).
Injection volume 1 ml and split mode (1:50).
Injector temperature: 280 °C.
Chromatographic separation
Column: HP1-MS (100% dimethylpolysiloxane), length 30 m, internal diameter 0.25 mm, film thickens 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 El = 70 eV. GC-MS transfer line T= 235°C, source and quadropole temperatures 280°C and 180°C, respectively. Scan range m/z scan range: from 50 (40) to 550 amu.

**FTIR-ATR (Perkin Elmer):** scan range 4000-400 cm-1; resolution 4cm-1

**GC- (MS)-IR** condensed phase (GC-MS (Agilent)) & IR (Spectra analyses-Danny) IR scan range 4000 to 7000, resolution 4cm-1
GC-method:
Injection volume 1 ml and split mode (1:5) .
Injector temperature: 280 °C.
Chromatographic separation
Column: HP1-MS (100% dimethylpolysiloxane), length 30 m, internal diameter 0.25 mm, film thickens 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.
Split MS : IR : (1:9)
MSD source El = 70 eV. GC-MS transfer line T= 235°C, source and quadropole temperatures 280°C and 180°C, respectively. Scan range m/z scan range: from 50 (40) to 550 amu.
IR (condensed phase): IR scan range 4000 to 7000, resolution 4cm-1
FIGURES OF SPECTRA

MS (EI)

Abundance

Scan 660 (4.044 min): DOF_HCL_1413-15_CHI.D\data.ms