ANALYTICAL REPORT

1-Cyclohexylmethylindole (C15H19N)

1-(cyclohexylmethyl)-1H-indole

Remark – other active cpd. detected: none

Sample ID: 1424-15
Sample description: Oil- yellowish
Sample type: RM-reference material
Comments1: Chiron AS Lot#16181;
Date of entry: 1/6/2016

Substance identified-structure2 (base form)

Systematic name: 1-(cyclohexylmethyl)-1H-indole

Other names:

Formula (per base form) C15H19N
Mw (g/mol) 213.32
Salt form: base
StdInChIKey HIOJKWCIURECFH-UHFFFAOYSA-N
Compound Class Indolalkylamines (fe tryptamines)
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/ DOI: 10.1021/ci100384d
Supporting information

<table>
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<tr>
<th>Analytical technique</th>
<th>applied</th>
<th>remarks</th>
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</table>
| GC-MS (EI ionization) | +       | NFL GC-RT (min): 6.36  
                          |         | BP(1): 130; BP(2): 213; BP(3): 131, |
| 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 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 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 (Agilent) & IR (Spectra analyses-Danny):**  
IR scan range 4000 to 700, 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 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.  
Split MS : IR : (1:9)  
MSD source EI = 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 700, resolution 4cm⁻¹
FIGURES OF SPECTRA

MS (EI)

Abundance

Scan 1320 (6.360 min): 1-Cyclohexylindole_1424-15_CHI.D\data.ms

m/z→

0 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220

200000 400000 600000 800000 1000000 1200000 1400000 1600000 1800000 2000000 2200000 2400000

55.1 77.0 90.0 1030 117.0 130.0 143.0 156.1 170.1 184.1 198.1 213.1
FTIR-ATR

IR-Condensed phase

NOTE: This is condensed phase IR (per base form of substance) Instrument (Biorad/GC)

Stran 4 od 4

ID 1424-15