



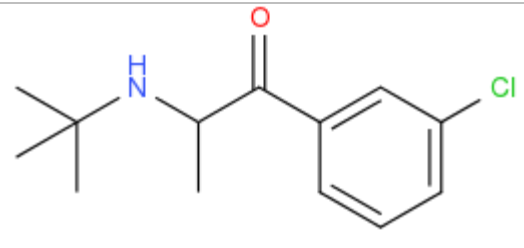
## ANALYTICAL REPORT

### Bupropion (C<sub>13</sub>H<sub>18</sub>ClNO)

#### (±)-2-(tert-Butylamino)-1-(3-chlorophenyl)propan-1-one

Remark – other NPS detected: **none**

Sample ID:	1101-14A
Sample description:	powder - white
Sample type:	RM-reference material
Comments:	LGC Lot#1589
Date of entry:	9/22/2014

Substance identified-structure <sup>i</sup> (base form)	
Systematic name	(±)-2-(tert-Butylamino)-1-(3-chlorophenyl)propan-1-one
Other names	
Formula (per base form)	C <sub>13</sub> H <sub>18</sub> ClNO
M <sub>w</sub> (g/mol)	239,74
Salt form	HCl
Smiles	<chem>C(C)(C)(C)NC(=O)C1=CC(=CC=C1)Cl</chem>
Compound Class	Cathinones
Other NPS detected	none
Add.info (purity..)	99,95%

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

Analytical technique:	applied	remarks
GC-MS (EI ionization)	+	NFL GC-RT (min): 4,56 BP(1): 44; BP(2): 100,BP(3) :139,
FTIR-ATR	+	

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, then 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. m/z scan range: from 50 (40) to 550 amu.

FTIR-ATR (Perkin Elmer): scan range 4000-400 cm<sup>-1</sup>; resolution 4cm<sup>-1</sup>

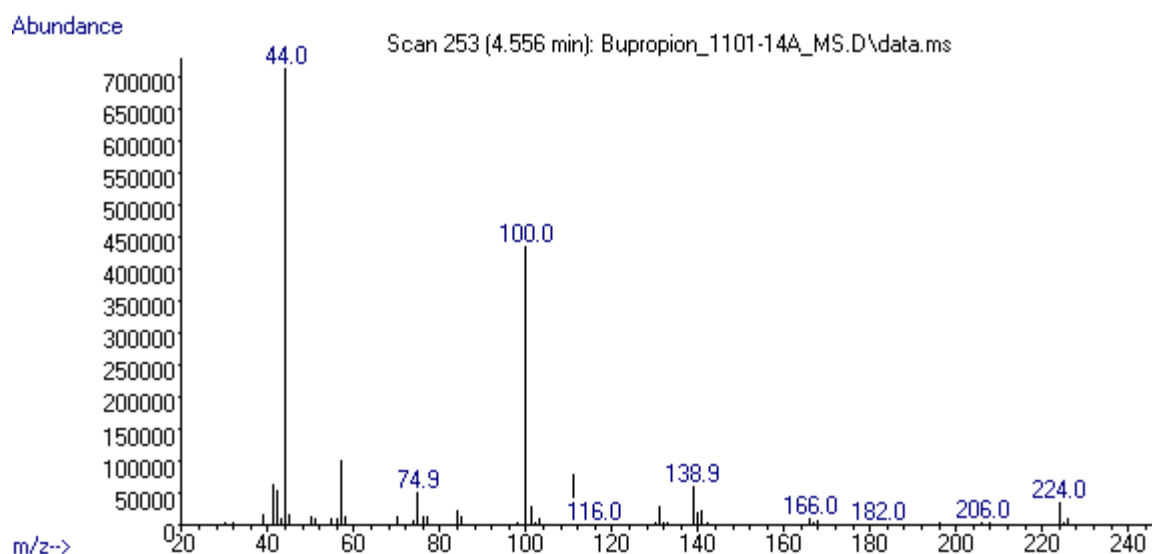
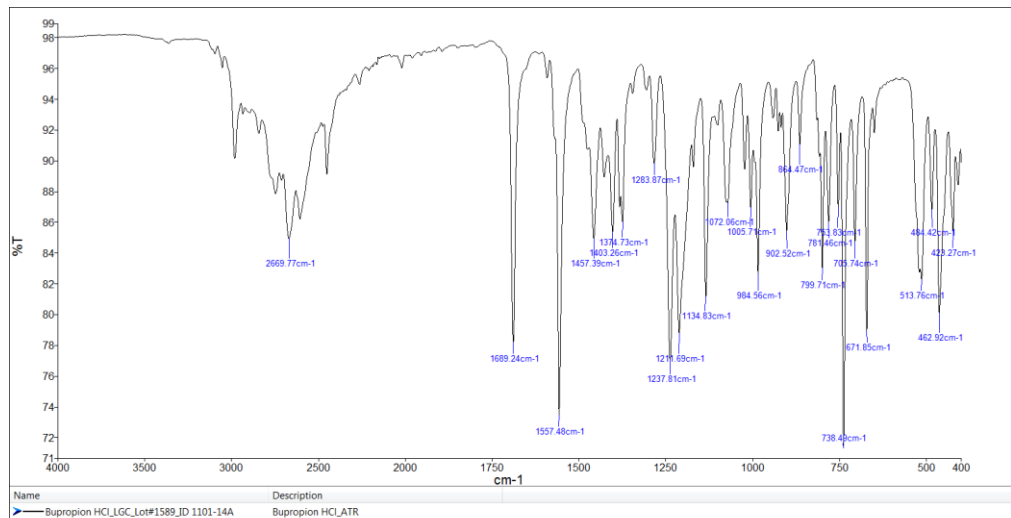


Figure 1: GC-MS spectrum



**Figure 2: FTIR ATR**

<sup>i</sup> Created by OPSIN free tool: <http://opsin.ch.cam.ac.uk/> DOI: 10.1021/ci100384d