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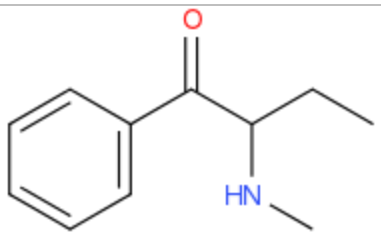
ANALYTICAL REPORT

Buphedrone (C11H15NO)

2-(methylamino)-1-phenylbutan-1-one

Remark – other NPS detected: none

Sample ID:	1068-13A
Sample description:	powder - white
Sample type:	RM-reference material
Comments:	LGC Lot#9725
Date of entry:	5/21/2013

Substance identified-structure[i] (base form)	
Systematic name	2-(methylamino)-1-phenylbutan-1-one
Other names	α-methylamino-Butyrophenone, MABP
Formula (per base form)	C11H15NO
M_w (g/mol)	177,24
Salt form	HCl
Smiles	CNC(C(=O)C1=CC=CC=C1)CC
Compound Class	Cathinones
Other NPS detected	none
Add.info (purity..)	99,90%

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Supporting information

Analytical technique:	applied	remarks
GC-MS (EI ionization)	+	NFL GC-RT (min): 3,26 BP(1): 72; BP(2): 77,BP(3) :57,
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 ^{0}C. 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 ^{0}C for 1 min, followed by heating up to 293 ^{0}C at a rate of 18 ^{0}C/min, hold for 6.1 min, than heating at 50 ^{0}C/min up to 325 ^{0}C and finally 2.8 min isothermal. MSD source EI = 70 eV. GC-MS transfer line T= 235^{0}C, source and quadropole temperatures 280^{0}C and 180^{0}C. m/z scan range: from 50 (40) to 550 amu.
FTIR-ATR (Perkin Elmer): scan range 4000-400 cm-1; resolution 4cm-1

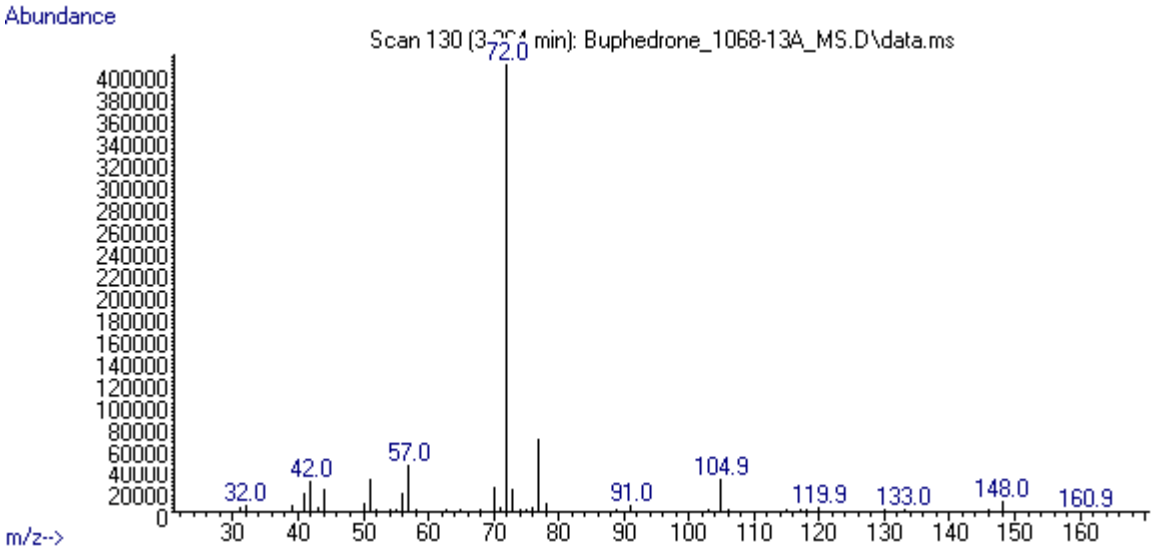

Figure 1: GC-MS spectrum

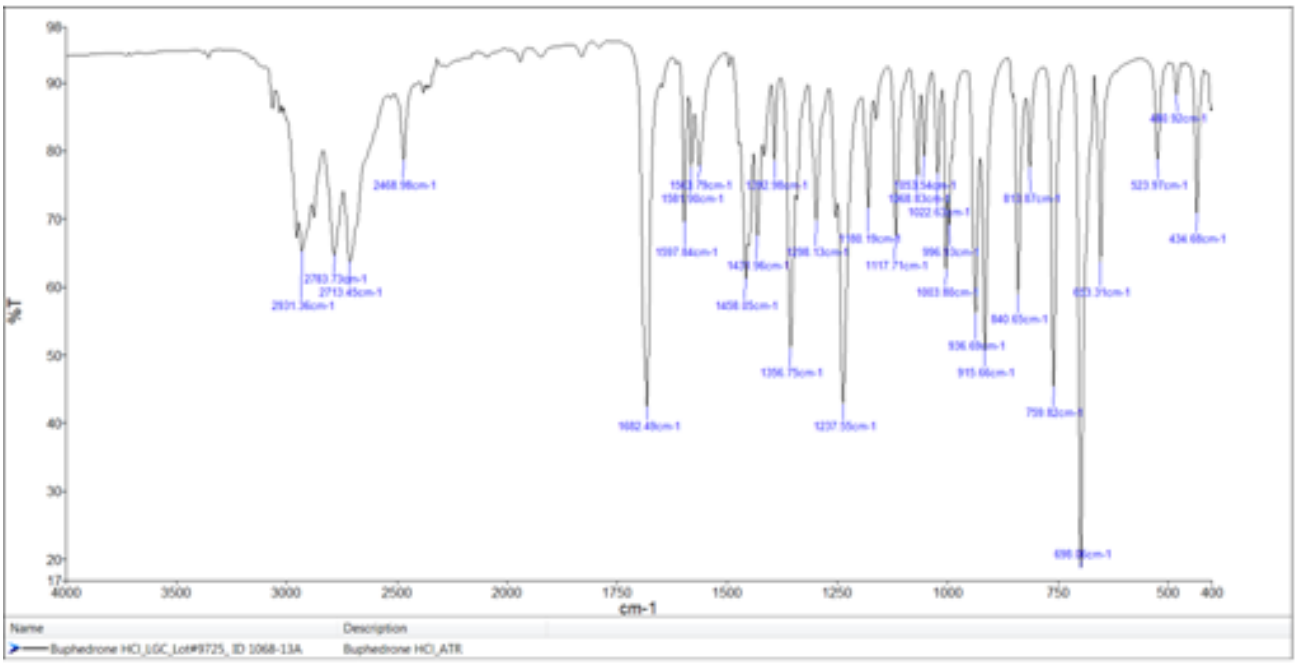

Figure 2: FTIR ATR

[i] Created by OPSIN free tool: http://opsin.ch.cam.ac.uk/ **DOI:** 10.1021/ci100384d