

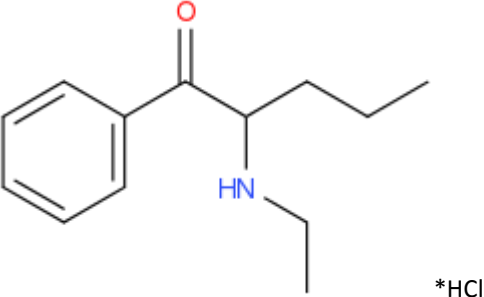


## ANALYTICAL REPORT

alpha-ethylaminopentiophenone; N-ethylnorpenthedrone (C<sub>13</sub>H<sub>19</sub>NO)

### 2-(ethylamino)-1-phenyl-1-pentanone

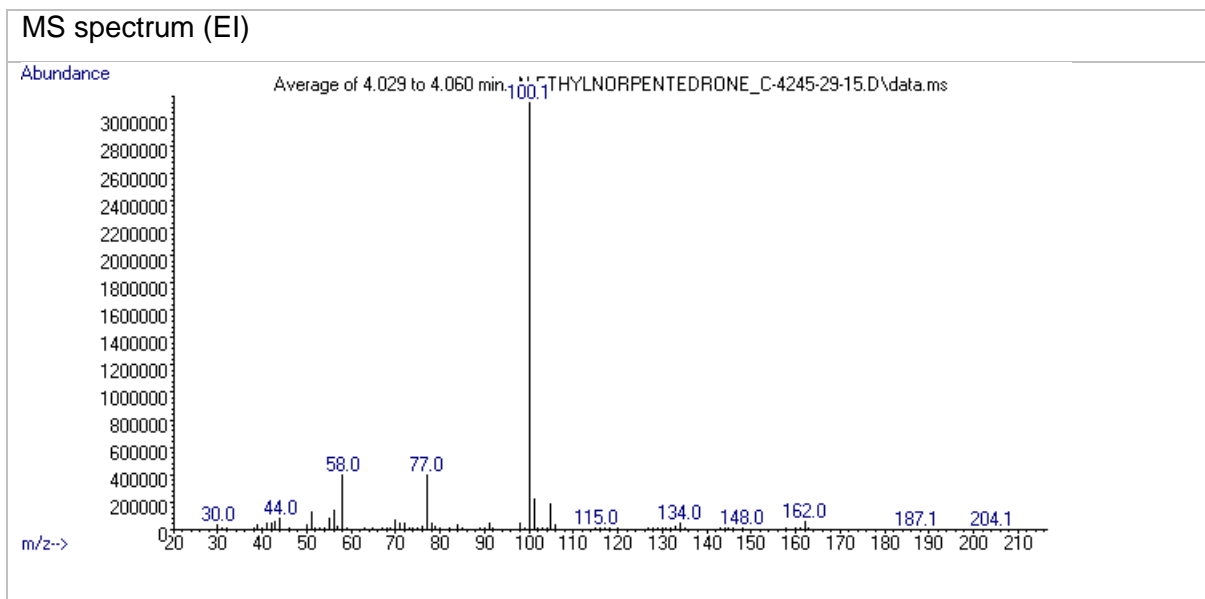
Sample ID:	C 4245-29/2015
Sample description:	powder - white
Report date:	21/02/2014
Sample type:	Seizure

Substance identified- structure <sup>i</sup>	
Systematic name	2-(ethylamino)-1-phenyl-1-pentanone
Other names	alpha-Ethylaminopentiophenone, N-ethylnorpenthedrone
Formula (per base form)	C <sub>13</sub> H <sub>19</sub> NO
M <sub>w</sub> (g/mol) per base form	205,30
Exact mass (monoisotopic):	205.146664
Salt form	HCl
Other compounds detected	none
Smiles	<chem>C(C)NC(C(=O)C1=CC=CC=C1)CCC</chem>
Compound Class	Cathinones

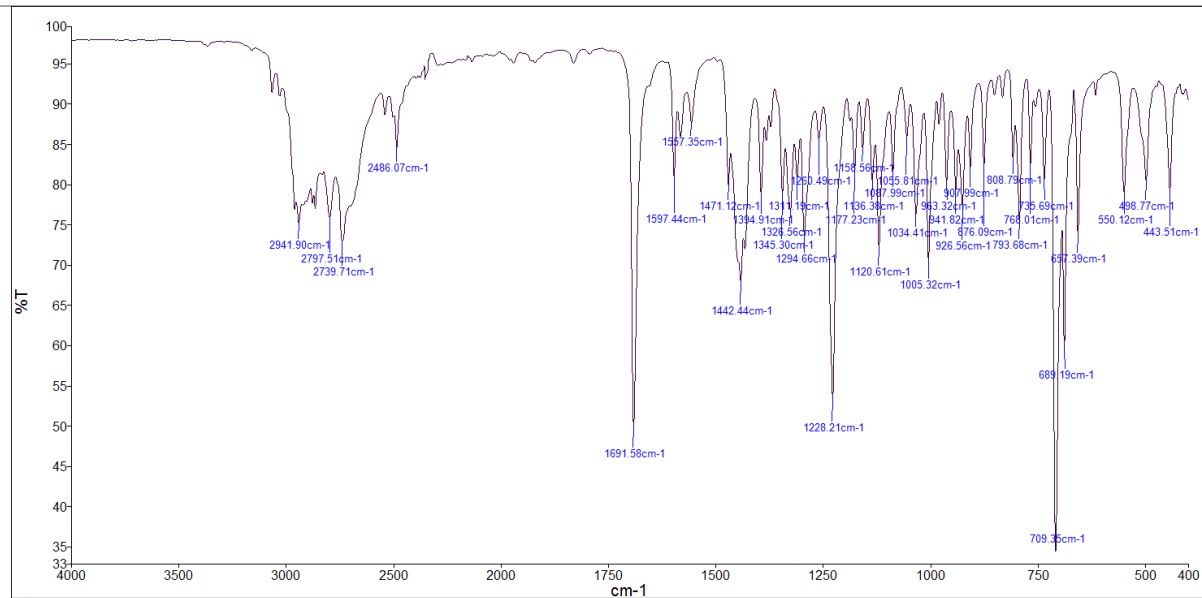
This report has been produced with the financial support of the Prevention of and fight against crime Programme of the European Union (grant agreement number JUST/2013/ISEC/DRUGS/AG/6413). The contents of this report are the sole responsibility of the National Forensic Laboratory and can in no way be taken to reflect the views of the European Commission.

## Supporting information

Analytical techniques:		remarks
GC-MS	+	
FTIR-ATR	+	Direct measurement
FTIR (condensed phase)	/	
HPLC-TOF	+	
NMR - confirmed	+	
Validation - other	/	
other	/	



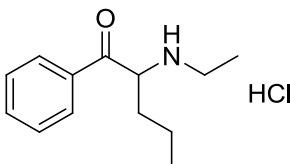
## FTIR - ATR



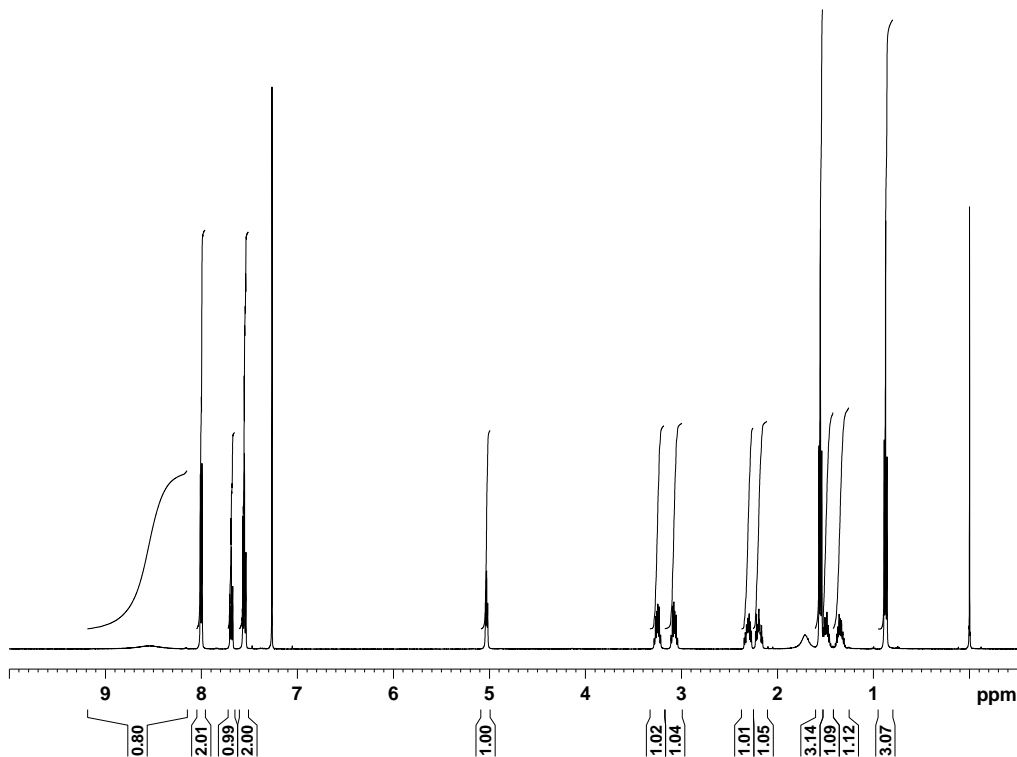
Name	Description
N-ETHYLNORPENTEDRONE_C-4245-29-2015	2-(ethylamino)-1-phenyl-1-pentanone hydrochloride, ID 1153



## REPORT

Sample ID:	<b>CARINA 4245-29/2015</b>
Received date:	February 12, 2015
Our notebook code:	P-4245-29-2015
NMR sample preparation:	5 mg dissolved in 0.7 mL CDCl <sub>3</sub>
NMR experiments:	<sup>1</sup> H, <sup>13</sup> C
Proposed structure with chemical name:	 2-(ethylamino)-1-phenylpentan-1-one hydrochloride
Comments:	- Structure confirmed by <sup>1</sup> H and <sup>13</sup> C NMR spectra. - Compound is pure by NMR.
Supporting information:	Copies of <sup>1</sup> H and <sup>13</sup> C NMR spectra
Author:	Prof. Dr. Janez Košmrlj
Date of report:	February 14, 2015

P-4245-29-2105  
1H



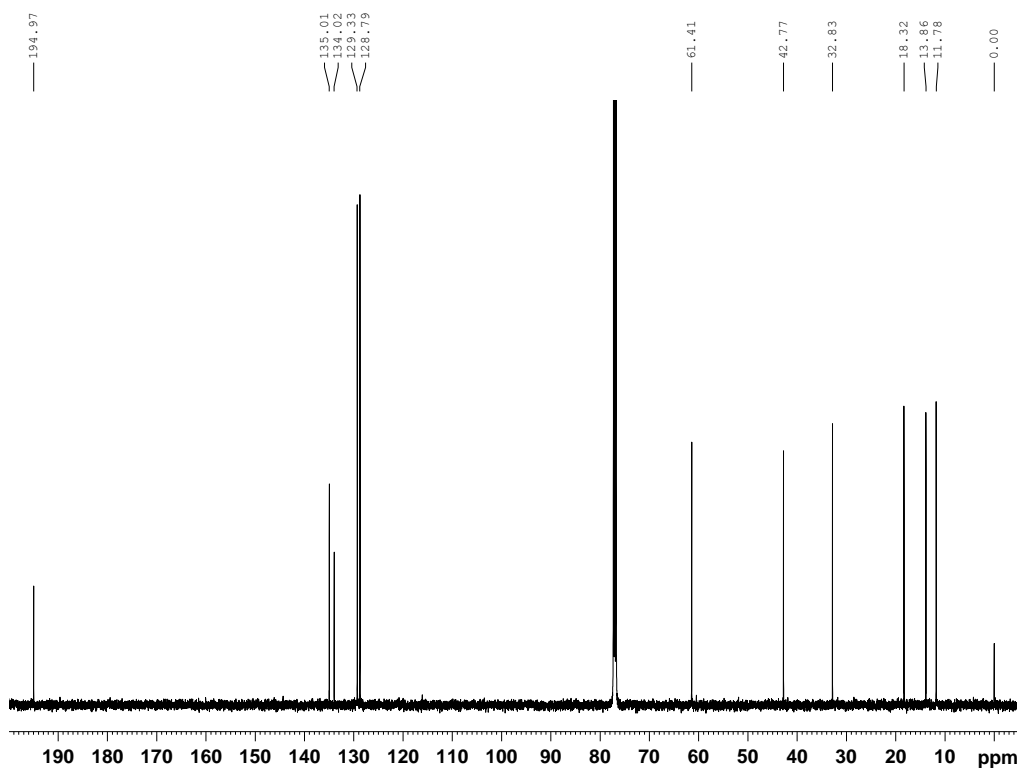
Current Data Parameters  
NAME P-4245-29-2015  
EXFNO 1  
PROCNO 1

F2 - Acquisition Parameters  
Date 20150213  
Time 17.57  
INSTRUM spect  
PROBHD 5 mm FAPBO BB-  
FULPROG zg30  
TD 65536  
SOLVENT CDCl3  
NS 16  
DS 2  
SWH 10330.578 Hz  
FIDRES 0.157632 Hz  
AQ 3.1719923 sec  
RG 144  
DW 48.400 usec  
DE 6.50 usec  
TE 296.0 K  
D1 1.00000000 sec

===== CHANNEL f1 =====  
NUC1 1H  
P1 8.90 usec  
PLW1 26.00000000 W  
SFO1 500.1330885 MHz

F2 - Processing parameters  
SI 65536  
SF 500.1300107 MHz  
WDW EM  
SSB 0  
LB 0.30 Hz  
GB 0  
PC 1.00

P-4245-29-2105  
13C



Current Data Parameters  
NAME P-4245-29-2015  
EXFNO 2  
PROCNO 1

F2 - Acquisition Parameters  
Date 20150214  
Time 0.08  
INSTRUM spect  
PROBHD 5 mm FAPBO BB-  
FULPROG zgpg30  
TD 65536  
SOLVENT CDCl3  
NS 10240  
DS 4  
SWH 29761.904 Hz  
FIDRES 0.454131 Hz  
AQ 1.1010548 sec  
RG 2050  
DW 16.800 usec  
DE 6.50 usec  
TE 296.0 K  
D1 1.00000000 sec  
D11 0.03000000 sec

===== CHANNEL f1 =====  
NUC1 13C  
P1 9.00 usec  
PLW1 122.00000000 W  
SFO1 125.7703637 MHz

===== CHANNEL f2 =====  
CPDPRG2 waltz16  
NUC2 1H  
PCPD2 80.00 usec  
PLW2 26.00000000 W  
PLW12 0.32179001 W  
PLW13 0.20595001 W  
SFO2 500.1320005 MHz

F2 - Processing parameters  
SI 32768  
SF 125.7577894 MHz  
WDW EM  
SSB 0  
LB 1.00 Hz  
GB 0  
PC 1.40