ANALYTICAL REPORT

2-MMC (C11H15NO)

2-(methylamino)-1-(2-methylphenyl)-1-propanone

Remark – other NPS detected: none

<table>
<thead>
<tr>
<th>Sample ID:</th>
<th>1047-12A</th>
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<tbody>
<tr>
<td>Sample description:</td>
<td>powder - white</td>
</tr>
<tr>
<td>Sample type:</td>
<td>RM-reference material</td>
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<tr>
<td>Comments:</td>
<td>Cayman Lot#0437035</td>
</tr>
<tr>
<td>Date of entry:</td>
<td>9/22/2014</td>
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</tbody>
</table>

Substance identified-structure (base form)

![Structure Diagram]

Systematic name 2-(methylamino)-1-(2-methylphenyl)-1-propanone
Other names 2-MMC; 2-methyl MC, 2-methylmethcathinone
Formula (per base form) C11H15NO
M
\(_w\) (g/mol) 177,24
Salt form HCl
Smiles CNC(C=O)C1=C(C=CC=C1)C
Compound Class Cathinones
Other NPS detected none
Add.info (purity..) 100%

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Supporting information

Analytical technique: | applied | remarks |
----------------------|---------|---------|
GC-MS (EI ionization) | +       | NFL GC-RT (min): 3,21
                  |         | BP(1): 58; BP(2): 91, BP(3): 119, |
FTIR-ATR             | +       | pending |
FTIR (condensed phase) | always as base form |

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, 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. m/z scan range: from 50 (40) to 550 amu.
FTIR-ATR (Perkin Elmer): scan range 4000-400 cm⁻¹; resolution 4cm⁻¹
FTIR (Spectra analyses-Danny): scan range 4000 to 700, resolution 4cm⁻¹

Abundance

Figure 1: GC-MS spectrum
Figure 2: FTIR ATR

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