1. GENERAL INFORMATION

**IUPAC Name:** 3-[2-(Dimethylamino)ethyl]-1H-indol-4-yl acetate

**CFR:** Not Scheduled (3/2013)

**CAS #:** 92292-84-7

**Synonyms:** 4-AcO-DMT; psilacetin; O-acetylpsilocin

**Source:** DEA Reference Material Collection

**Appearance:** Off-white powder (oxalate)

**Kovat’s Index:** Pending

**UV$_{max}$:** Not Determined

2. CHEMICAL AND PHYSICAL DATA

2.1 CHEMICAL DATA

<table>
<thead>
<tr>
<th>Form</th>
<th>Chemical Formula</th>
<th>Molecular Weight</th>
<th>Melting Point (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>C$<em>{14}$H$</em>{18}$N$<em>{2}$O$</em>{2}$</td>
<td>246</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Oxalate</td>
<td>C$<em>{14}$H$</em>{18}$N$<em>{2}$O$</em>{2}$C$<em>{2}$H$</em>{2}$O$_{4}$</td>
<td>336</td>
<td>144.2</td>
</tr>
</tbody>
</table>
3. ADDITIONAL RESOURCES

Wikipedia

4. QUALITATIVE DATA

4.1 NUCLEAR MAGNETIC RESONANCE

Method NMR CD$_3$OD

Sample Preparation: Dilute analyte to ~10 mg/mL in deuterated methanol (CD$_3$OD) containing TMS for 0 ppm reference.

Instrument: Varian Mercury 400 MHz NMR spectrometer with proton detection probe

Parameters: Spectral width: at least containing -3 ppm through 13 ppm
Pulse angle: 90°
Delay between pulses: 45 seconds
Number of scans (NT): 8
Number of steady state scans: 0
Oversampling: 4 or more
Shimming: automatic gradient shimming of Z1-4 shims
Phasing, Drift Correction: automatic or manual
4.2 GAS CHROMATOGRAPHY/MASS SPECTROMETRY

Sample Preparation: Dilute analyte to ~1 mg/mL in methanol.

Instrument: Gas chromatograph operated in split mode with MS detector

Column: DB-1 MS or equivalent; 30m x .25mm x .25μm

Carrier gas: Helium at 1 mL/min

Temperatures:
- Injector: 280°C
- MSD transfer line: 280°C
- MS Source: 230°C
- MS Quad: 150°C
- Oven program:
  1) 100°C initial temperature for 1.0 min
  2) Ramp to 300°C at 12°C/min
  3) Hold final temperature for 9.0 min

Injection Parameters: Split Ratio = 25:1, 1 μL injected

MS Parameters:
- Mass scan range: 34-550 amu
- Threshold: 100
- Tune file: stune.u
- Acquisition Mode: scan

Retention Time: 13.199 min
4.3 INFRARED SPECTROSCOPY (FTIR)

**Instrument:**
FTIR with ATR attachment

**Scan Parameters:**
- Number of scans: 32
- Number of background scans: 32
- Resolution 4 cm$^{-1}$
- Sample gain: 8
- Aperture: 150