Analytical profiles of the hallucinogenic amphetamines DOB, DOC and DOI.

The compounds

| A | 4-chloro-2,5-dimethoxyamphetamine 2,5-dimethoxy-4-chloroamphetamine $C_{11}H_{16}CINO_2$ mw 229 | DOC | CH ₃ O CI OCH ₃ OCH ₃ |
|---|--|-----|---|
| в | 4-bromo-2,5-dimethoxyamphetamine 2,5-dimethoxy-4-bromoamphetamine $C_{11}H_{16}BrNO_2$ mw 274 | DOB | CH ₃ O Br OCH ₃ OCH ₃ |
| С | 4-iodo-2,5-dimethoxyamphetamine 2,5-dimethoxy-4-iodoamphetamine $C_{11}H_{16}INO_2$ mw 321 | DOI | CH ₃ O |

All three compounds are controlled by the generic legislation of the UK Misuse of Drugs Act in Schedule 1 as Class A.

DOB

DOB (PIHKAL #62) is also known as bromo-STP or brolamfetamine. It has both hallucinogenic and sympathomimetic properties and is a much more potent compound than MDMA with a long duration of action. A typical dose would be 1-5 mg. Effects are reported to begin three to four hours after ingestion and may take 24 hours to resolve. It may produce profound disturbances of perception for up to 18 hours. DOB has been seen in the UK in tablets and impregnated in paper doses similar to LSD.

DOC

DOC (PIHKAL #64) is a rare compound which has only been seen in Sweden, Finland, USA and the UK. It is a very potent compound with a long duration of action. A typical dose would be 1.5 - 3 mg. Effects are reported to begin slowly and may take 16 - 30 hours to resolve. Various dose forms have been seen; as a powder, a liquid, on sugar lumps and in the UK & Finland on paper doses similar to LSD.

DOI

DOI (PIHKAL #67) has hallucinogenic properties and may be confused with LSD by inexperienced users. It is a very potent compound with a long duration of action. A typical dose would be 1.5 - 3 mg. Effects are reported to begin slowly and may take 16 - 30 hours to resolve. The after effects include difficulty getting to sleep and communicating. Depending on the amount taken, these symptoms may persist for days.

<u>GC/MS</u>

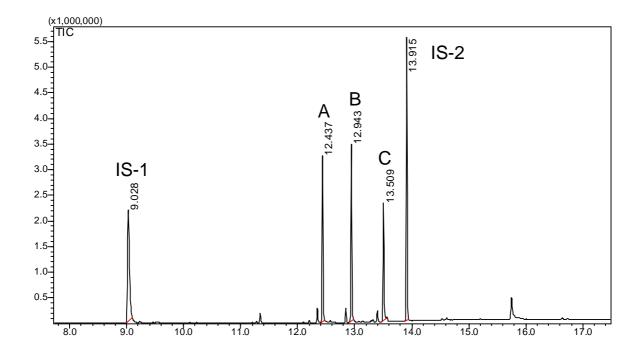
Samples were analysed on a Shimadzu QP2010 gas chromatograph / mass spectrometer with an HP5MS column (30m x 0.25mm, 0.50 μ m).

| Column oven temperature | 80°C | |
|-------------------------|------------|--|
| Injection temperature | 225°C | |
| Injection mode | Splitless | |
| Carrier gas | Helium | |
| Flow rate | 1.0 ml/min | |
| Pressure | 9.5 psi | |
| Ion source temperature | 200°C | |
| Interface temperature | 250°C | |

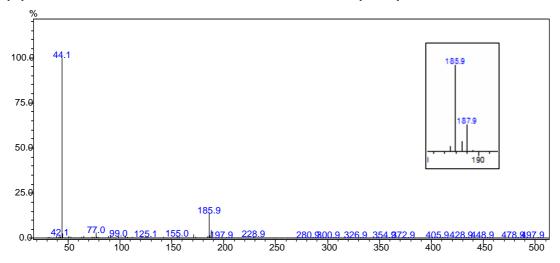
Column oven temperature programme:

| Rate | Final temperature | Hold time | |
|-------------|-------------------|--------------|--|
| - | 80°C | 4 minutes | |
| 20.00°C/min | 280°C | 8 minutes | |
| 20.00°C/min | 290°C | 11.5 minutes | |

Chromatogram:-

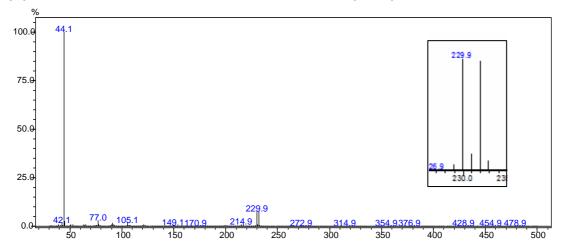


| ID | Compound Name | Abbreviations | Retention time (mins.) |
|------|-----------------------------------|---------------|---------------------------|
| IS-1 | Quinoline | IS-1 | 9.028 |
| A | 4-Chloro-2,5-dimethoxyamphetamine | DOC | 12.437 |
| В | 4-Bromo-2,5-dimethoxyamphetamine | DOB | 12.943 |
| С | 4-lodo-2,5-dimethoxyamphetamine | DOI | 13.509 |
| IS-2 | Pyribenzamine (tripelenamine) | IS-2 | 13.915 |

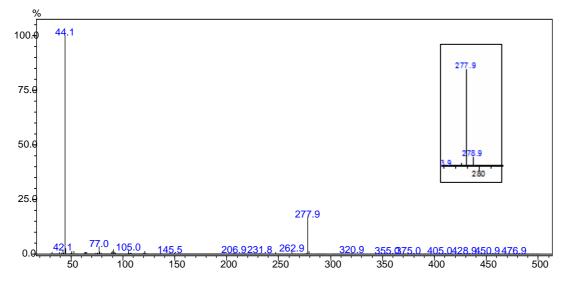


(A) 4-CHLORO-2,5-DIMETHOXYAMPHETAMINE (DOC) 12.437 mins





(C) 4-IODO-2,5-DIMETHOXYAMPHETAMINE (DOI) 13.509 mins



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