



4-Iodo-2,5-Dimethoxyphenethylamine (Street Names: 2C-I, i)

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Introduction:

4-Iodo-2,5-dimethoxyphenethylamine (2C-I, 4-iodo-2,5-DMPEA) is a synthetic drug abused for its hallucinogenic effects. It has been encountered in a number of states by federal, state, and local law enforcement agencies.

Licit Uses:

2C-I has no approved medical uses in the United States.

Chemistry and Pharmacology:

4-Iodo-2,5-dimethoxyphenethylamine is closely related to the phenethylamine hallucinogens, 1-(4-bromo-2, 5-dimethoxyphenyl)-2-aminopropane (DOB) and 2,5-dimethoxy-4-methylamphetamine (DOM). Like DOM and DOB, 2C-I displays high affinity for central serotonin receptors. 2C-I selectively binds to the 5-HT receptor system.

Drug discrimination studies in animals indicate that 2C-I produces discriminative stimulus effects that are similar to those of several schedule I hallucinogens such as lysergic acid diethylamide (LSD), N,N-dimethyltryptamine (DMT) and methylenedioxymethamphetamine (MDMA). In rats trained to discriminate LSD, DMT or MDMA from saline, 2C-I fully substituted for these schedule I hallucinogens.

In humans, 2C-I produces dose dependent psychoactive effects. Users' reports have mentioned oral doses between 3 and 25 mg, producing LSD-like hallucinations and visual distortions, and MDMA-like empathy. Onset of subjective effects following 2C-I ingestion is around 40 minutes with peak effects occurring at approximately 2 hours. Effects of 2C-I can last up to 8 hours. Various users reported delayed desired effects compared to related drugs, which may result in some users taking additional doses or other drugs which may increase the risk of toxicity or accidental over dosage.

Radioimmunoassay detection system that is commonly used for testing amphetamine and hallucinogens is not expected to detect 2C-I. In the Marquis Reagent Field Test, 2C-I produces a dark green to black color.

Illicit Uses:

2C-I is abused for its hallucinogenic effects. 2C-I is taken orally in tablet or capsule forms or snorted in its powder form. It has also been found impregnated on small squares of blotter paper for oral administration, which is a technique often seen for the distribution and abuse of LSD. The drug has been misrepresented by distributors and sold as other hallucinogens such as MDMA and LSD.

User Population:

2C-I is used by the same population as those using "Ecstasy" and other club drugs, high school and college students, and other young adults in dance and nightlife settings.

Illicit Distribution:

2C-I is distributed as capsules, tablets, in powder form, or in liquid form. DEA identified occurrences of the drug being purchased through Internet retailers. In one instance, it was purchased in powder form through the Internet and encapsulated for retail, at a street value of \$6 per capsule. In Europe, 2C-I has often been seized in tablet form with an 'i' logo which may be to signify that it is not ecstasy (MDMA).

The National Forensic Laboratory Information System (NFLIS) is a DEA database that collects scientifically verified data on drug items and cases submitted to and analyzed by federal, state, and local forensic laboratories. The System to Retrieve Information from Drug Evidence (STRIDE)/STARLiMS provides information on drug seizures reported to and analyzed by DEA laboratories. In NFLIS, the first encounter of 2C-I occurred in 2003. Since its first encounter, there have been approximately a total of 622 exhibits, from 2003 to 2019, identified as 2C-I by federal, state, and local forensic laboratories in 41 states. In 2010, there were 61 2C-I reports; 95 2C-I reports in 2011, and 94 reports in 2012. More recently, there have been 19 reports of 2C-I in 2016, 26 reports in 2017, and preliminarily 15 reports in 2018 and 4 reports in 2019.

Control Status:

The Controlled Substances Act (CSA) lists 2C-I in schedule I.

Comments and additional information are welcomed by the Drug and Chemical Evaluation Section. Fax 571-362-4250, Telephone 571-362-3249, or Email DPE@usdoj.gov.