



4-Bromo-2,5-Dimethoxyphenethylamine (Street Names: 2C-B, Nexus, 2's, Toonies, Bromo, Spectrum, Venus)

February 2020

Introduction:

4-Bromo-2,5-dimethoxyphenethylamine (2C-B, 4-bromo-2,5-DMPEA) is a synthetic schedule I hallucinogen. It is abused for its hallucinogenic effects primarily as a club drug in the rave culture and "circuit" party scene.

Licit Uses:

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

Chemistry and Pharmacology:

4-Bromo-2,5-dimethoxyphenethylamine is closely related to the phenylisopropylamine hallucinogen 1-(4-bromo-2, 5-dimethoxyphenyl)-2-aminopropane (DOB) and is referred to as alpha-desmethyl DOB. 2C-B produces effects similar to 2,5-dimethoxy-4-methylamphetamine (DOM) and DOB. 2C-B displays high affinity for central serotonin receptors. 2C-B produces dose-dependent psychoactive effects. Threshold effects are noted at approximately 4 mg of an oral dose; the user becomes passive and relaxed and is aware of an integration of sensory perception with emotional states. There is euphoria with increased body awareness and enhanced receptiveness of visual, auditory, olfactory, and tactile sensation. Oral doses of 8 to 10 mg produce stimulant effects and cause a full intoxicated state. Doses in the range of 20 to 40 mg produce LSD-like hallucinations. Doses greater than 50 mg have produced extremely fearful hallucinations and morbid delusions. Onset of subjective effects following 2C-B ingestion is between 20 to 30 minutes with peak effects occurring at 1.5 to 2 hours. Effects of 2C-B can last up to 8 hours.

Radioimmunoassay detection system that is commonly used for testing amphetamine and hallucinogens does not detect 2C-B. In the Marquis Reagent Field Test-902, 2C-B produces a bright green color. 2C-B is the only known drug to produce a bright green color when using this test.

Illicit Uses:

2C-B is abused for its hallucinogenic effects. 2C-B is abused orally in tablet or capsule forms or snorted in its powder form. The drug has been misrepresented by distributors and sold as other hallucinogens such as MDMA and LSD. Some users abuse 2C-B in combination with LSD (referred to as a "banana split") or MDMA (called a "party pack").

User Population:

2C-B is used by the same population as those using "Ecstasy" and other club drugs; high school and college students, and other young adults who frequent "rave" or "techno" parties.

Illicit Distribution:

2C-B is distributed as tablets, capsules, or in powder form. Usually sold as MDMA, a single dosage unit of 2C-B typically sells for \$10 to \$30 per tablet. The illicit source of 2C-B currently available on the street has not been identified by DEA. Prior to its control, DEA seized both clandestine laboratories and illicit "repacking shops." As the name implies, these shops would repackage and reformulate the doses of the tablets prior to illicit sales.

According to the System to Retrieve Information from Drug Evidence (STRIDE) data, the first recorded submission by law enforcement to DEA forensic laboratories of a drug exhibit containing 2C-B occurred in 1986.

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 STRIDE database, integrated into STARLiMS, a web-based, commercial laboratory information management system, since October 1, 2014 has replaced STRIDE as the DEA laboratory drug evidence data system of record which provides information on drug seizures reported to and analyzed by DEA laboratories. Since early 2000's, 2C-B has been encountered by law enforcement in 48 states and Puerto Rico. Law enforcement officials submitted 89 exhibits identified as 2C-B to federal, state, and local forensic laboratories in 2010, 64 exhibits in 2011, and 85 exhibits in 2012. In more recent years, there have been 58 2C-B exhibits in 2015, 89 in 2016, 91 in 2017, 69 in 2018, and a sharp increase to 159 exhibits for 2019, so far.

Control Status:

2C-B is controlled in schedule I of the Controlled Substances Act (CSA).

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.