April 2024

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

## 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:

4-Bromo-2,5-dimethoxyphenethylamine is closely related to the phenylisopropylamine hallucinogen 4-bromo-2,5-dimethoxy-amphetamine (DOB) and is referred to as alpha-desmethyl DOB.

## Pharmacology:

2C-B produces effects similar to 4-methyl-2,5-dimethoxy-amphetamine (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 $2 \mathrm{C}-\mathrm{B}$ 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. $2 \mathrm{C}-\mathrm{B}$ is the only known drug to produce a bright green color when using this test.

## Illicit Uses:

$2 \mathrm{C}-\mathrm{B}$ is abused for its hallucinogenic effects. $2 \mathrm{C}-\mathrm{B}$ 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:

$2 \mathrm{C}-\mathrm{B}$ 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. 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.

The DEA forensic laboratory system first identified 2C-B in an exhibit submitted by law enforcement in 1986. DEA's National Forensic Laboratory Information System (NFLIS) Drug database collects scientifically verified data on drug items and cases submitted to and analyzed by participating federal, state, and local forensic laboratories. According to this system, 2C-B has been encountered by law enforcement in 48 states and Puerto Rico, since 1998. Over time, 2C-B was identified in 17 items in 2005, 89 in 2010, 59 in 2015, and 54 in 2020. There was a spike to 201 in 2019, but recently there were only 27 in 2022 and 34 in 2023.

## Control Status:

2C-B is controlled in schedule । 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@dea.gov.

