

## Emerging Designer Drug Monograph

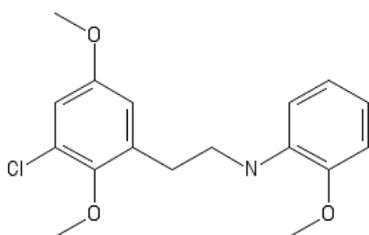
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**Drug Name:** 25C-NBOMe

**Synonyms:** 2-(4-chloro-2,5-dimethoxyphenyl)-N-(2-methoxybenzyl)ethanamine, monohydrochloride; 2C-C-NBOMe; NBOMe-2C-C; Cimbi-82; Pandora; Dime

**Structure:**



**Formula:** C<sub>18</sub>H<sub>22</sub>ClNO<sub>3</sub>

**Molecular Weight:** 335.8

**Pharmacological Drug Class:** 25-C-NBOMe is an hallucinogen. The compound is a partial 5-HT<sub>2A</sub> agonist (Zuba). Activation of monoamine receptor activity and reuptake inhibition increases synaptic serotonin and norepinephrine resulting in some stimulant effects (See [www.caymanchem.com](http://www.caymanchem.com)).

**Metabolism:** The metabolism of 25C-NBOMe has not been outlined. Generally, 2C compounds are metabolized by O-demethylation at position 2 or 5 of the aromatic ring. The compound is deaminated by MAO-A or MAO-B. The deaminated metabolite is then oxidized to the corresponding acid, which is then reduced to the corresponding alcohol. Phase II metabolism incorporates glucuridation or sulfination (Meyer, Maurer).

**Blood Concentrations:** No blood concentrations have been recorded in 25C-NBOMe literature.

**Effects and Toxicity:** User reports indicate 25C-NBOMe can be taken nasally, orally, buccally, and sublingually (see [www.erowid.org](http://www.erowid.org)). Reports suggest some stimulant effects including physical and mental stimulation, increased awareness, euphoria, mydriasis, and insomnia. Hallucinogenic effects include spiritual experiences, difficulty focusing, euphoria, and paranoia. According to the DEA toxic effects include seizures, cardiac and respiratory arrest.

**Analysis:** 25-C-NBOMe is a basic drug that extracts along with amphetamines and chromatographs well through GC-MS after derivatization with trifluoroacetic anhydride (TFAA):chloroform. Dominant ions are observed at m/z 191, 171, and 155 (Zuba). [SWGDRUG](#) outlines general GC-MS parameters for 25C-NBOMe analysis and includes sample chromatograms. 25C-NBOMe can also be analysed through LC-MS, NMR, and FTIR.

**References:**

1. Meyer, M. R., Maurer, H. H. (2010) Metabolism of designer drugs of abuse: an updated review. *Current Drug Metabolism*, 11(5), 468 - 482. <http://www.ncbi.nlm.nih.gov/pubmed/20540700>
2. Zuba, D., Sekuła, K., Buczek, A. (2013) 25C-NBOMe--new potent hallucinogenic substance identified on the drug market. *Forensic Science International*, 227(1-3), 7 - 14. <http://www.ncbi.nlm.nih.gov/pubmed/22989597>

Cayman Chemical

<https://www.caymanchem.com/pdfs/9001096.pdf>

SWGDRUG Monograph

<http://www.swgdrug.org/Monographs/25C-NBOMe.pdf>

2C-NBOMe Erowid

<http://www.erowid.org/chemicals/nbome/nbome.shtml>