

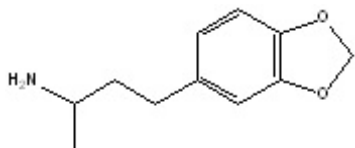
Drug Status Report

Drug: 1-(3,4-methylenedioxyphenyl)-3-butanamine

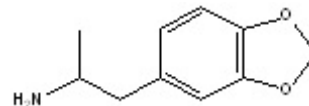
Drug Name Status: 1-(3,4-methylenedioxyphenyl)-3-butanamine is the common name.

Chemical Name: 4-(benzodioxol-5-yl)-butan-2-amine

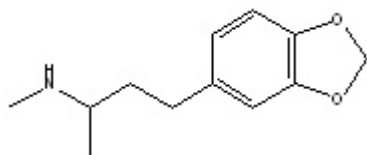
Chemical structure:



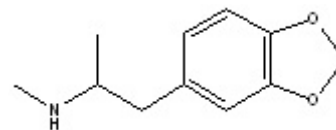
1-(3,4-methylenedioxyphenyl)-3-butanamine



3,4-Methylenedioxyamphetamine (MDA)



N-methyl-1-(3,4-methylenedioxyphenyl)-3-butanamine
(HMDMA)



3,4-methylenedioxymethamphetamine
(MDMA)

Molecular Formula: C₁₁H₁₅NO₂

Pharmacological class / Application: analogue of amphetamine

International status:

US: The substance is not currently listed on the schedules to the US Controlled Substances Act and is not mentioned on the DEA website. However, the substance may be considered controlled in the US due to the analogue provisions in the CSA.

United Nations: The substance is not listed on the Yellow List - List of Narcotic Drugs under International Control nor the Green List - List of Psychotropic Substances under International Control.

Canadian Status: 1-(3,4-methylenedioxyphenyl)-3-butanamine is not currently listed in the Schedules to the CDSA. However, the structure of 1-(3,4-methylenedioxyphenyl)-3-butanamine is substantially similar to 3,4-methylenedioxyamphetamine (MDA) differing only with an additional CH₂ group in the side chain. This structural similarity is also observed between 3,4-methylenedioxymethamphetamine (MDMA) and *N*-methyl-1-(3,4-methylenedioxyphenyl)-3-

butanamine (HMDA), which is a well-characterised homologue of MDMA^{1,2}.

3,4-methylenedioxyamphetamine (MDA) is presently listed as sub-item 5 under Item 1 of Schedule III to the CDSA, under the item heading “Amphetamines, their salts, derivatives, isomers and analogues and salts of derivatives, isomers and analogues”. The term "analogue" means a substance that, in relation to a controlled substance, has a substantially similar chemical structure. Therefore, 1-(3,4-methyldioxyphenyl)-3-butanamine is considered to be controlled under item 1(5) of Schedule III to the CDSA by virtue of being an analogue of MDA.

Recommendation: 1-(3,4-methyldioxyphenyl)-3-butanamine is included in item 1 of Schedule III to the CDSA and is considered to be a controlled substance.

June 3rd 2010.

¹Kato, N. *et al.* (2008) Thin layer chromatography/fluorescence detection of 3,4-methylenedioxy-methamphetamine and related compounds, *J. Forensic Sci.* **53**:1367-1371.

²Bronson, ME. *et al.* (1994) Behavioral and developmental effects of two 3,4-methylenedioxymethamphetamine (MDMA) derivatives, *Drug Alcohol Dependence*, **36**:161-166.