

## Drug Status Report

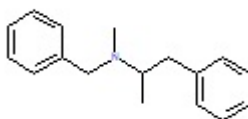
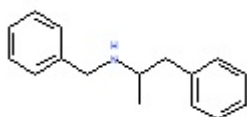
**Drug:** Norbenzphetamine hydrochloride

**Drug Name Status:** Norbenzphetamine hydrochloride is a common name.

**Chemical Name:** N-benzyl- $\alpha$ -methyl-phenethylamine

**Other Names:** 1-phenyl-2-benzylaminopropane

**Chemical structure:**



**Benzphetamine**

**Molecular Formula:** C<sub>16</sub>H<sub>19</sub>N

**CAS-RN:** 1085-42-3

**Pharmacological class / Application:** 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.

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: Norbenzphetamine is not currently listed in the CDSA. However, the substance is a metabolite of benzphetamine, formed *via* the oxidation of benzphetamine by the cytochrome P450 enzyme CYP2B4<sup>1</sup>. Benzphetamine is listed as sub-item 18 under item 1 of Schedule III to the CDSA, under the heading "Amphetamines, their salts, derivatives, isomers and analogues and salts of derivatives, isomers and analogues including:" Considering that norbenzphetamine is a metabolite of benzphetamine, it is included under item 1(18) of Schedule III by virtue of being a derivative of norbenzphetamine.

Recommendation: Norbenzphetamine is included under item 1(18) of Schedule III to the CDSA and is a controlled substance.

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<sup>1</sup>Sheng, X. *et al.* (2009) Kinetics of oxidation of benzphetamines by compounds I of cytochrome P450 2B4 and its mutants, *J. Am. Chem. Soc.* **131**:2971-2976.

July 15<sup>th</sup> 2010.