Emerging Designer Drug Monograph

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Drug Name: Methedrone

Synonyms: para-Methoxymethcathinone, PMMC, Methoxyphedrine, 4-Methedrone, 1-(4-methoxyphenyl)-2-(methylamino)-1-propanone (hydrochloride)

Structure:

\[
\begin{align*}
\text{O} & \text{CH}_3 \text{CH}_3 \\
\text{NH} & \text{CH}_3 \\
\text{O} & \\
\text{H}_3\text{C} & \text{O} \\
\text{CH}_3 & \text{CH}_3
\end{align*}
\]

Formula: C\textsubscript{11}H\textsubscript{15}NO\textsubscript{2}

Molecular Weight: 193.1

Pharmacological Drug Class: Central nervous system stimulant. Methedrone inhibits monoamine oxidase reuptake increasing synaptic catecholamine concentrations (1).

Metabolism: Unknown.

Blood Concentrations: Recorded methedrone blood concentrations range from 0.2 to 4.8 µg/g. Fatal blood concentrations have been recorded above 8 µg/g. (1,2).

Effects and Toxicity: Users describe psychoactive effects similar to ecstasy including mild euphoria and increased alertness. However, users feel the effects diminish quickly and feel compelled to redose (see www.erowid.com). Toxicity is associated with hypertension and tachycardia (2).

Analysis: Methedrone is a basic compound that chromatographs well with GC-MS following derivatization. GC-MS analysis has been used to quantitate methedrone in blood. LC-MS has been used for hair and urine methedrone screening and quantitation. (2,3).
References:


Cayman Chemical
[https://www.caymanchem.com/pdfs/10529.pdf](https://www.caymanchem.com/pdfs/10529.pdf)

Forendex

Methedrone Erowid