

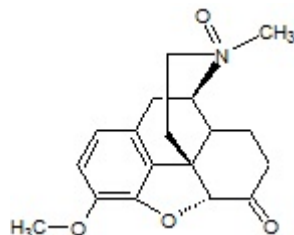
## Drug Status Report

**Drug:** Hydrocodone N-oxide

**Drug Name Status:** Hydrocodone N-oxide is the common name.

**Chemical Name:** (5 $\alpha$ )-4,5-Epoxy-3-methoxy-17-methyl-morphinan-6-one, 17-oxide

**Chemical structure:**



**Molecular Formula:** C<sub>18</sub>H<sub>21</sub>NO<sub>4</sub>

**Pharmacological class / Application:** opium related substance

**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 definition of narcotic drug in the CSA “(A) Opium, opiates, derivatives of opium and opiates, including their isomers, esters, ethers, salts, and salts of isomers, esters, and ethers, whenever the existence of such isomers, esters, ethers, and salts is possible within the specific chemical designation” may include hydrocodone N-oxide.

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: Item 1 of Schedule I to the CDSA is “Opium Poppy (*Papaver somniferum*), its preparations, derivatives, alkaloids and salts, including:

- (1) Opium
- (2) Codeine (methyldorphine)
- (3) Morphine (7,8--didehydro--4,5--epoxy--17 --methyldorphinan--3,6--diol)
- (4) Thebaine (paramorphine)

and the salts, derivatives and salts of derivatives of the substances set out in subitems (1) to (4), including:”

There then follows a list of 27 substances to illustrate the types of substances included in the item of the schedule. This list has been interpreted to include, as well, the salts, derivatives and salts

of derivatives of the substances.

Item 1 of Schedule I has been interpreted to include a broad range of substances related to the opium alkaloids and the substances included specifically in item 1. In assessing the status of substances in the past four years, no substance similar to any of the opium related substances has been determined to be “non-controlled”, i.e., outside the application of the CDSA. During the same period, many substances related to the opium alkaloids have been declared to be “controlled”. These include the 17-oxides of oxycodone, codeine, morphine and oxymorphone.

Recommendation: Hydrocodone N-oxide is included in item 1 of Schedule I to the CDSA and is a controlled substance.

July 30, 2008