

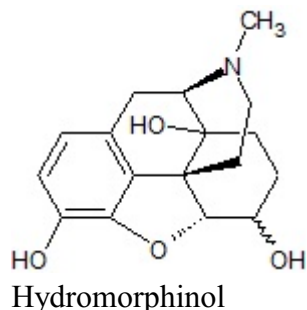
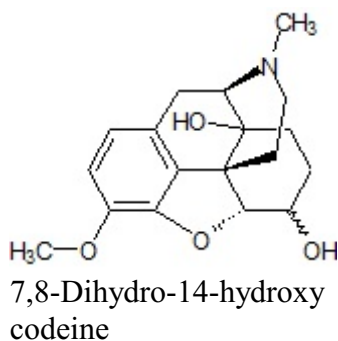
Drug Status Report

Drug: 7,8-Dihydro-14-hydroxycodeine

Drug Name Status: 7,8-Dihydro-14-hydroxycodeine is the common name

Chemical Name: 4,5- α -Epoxy-3-methoxy-17-methyl-morphinan-6- α ,14-diol

Chemical structure:



Molecular Formula: C₁₈H₂₃NO₄

Pharmacological class / Application:

International status:

US: Hydromorphinol is listed on Schedule I to the Controlled Substances Act. The ethers of substances listed on this schedule are also included in the schedule.

7,8-Dihydro-14-hydroxycodeine is the 3-methyl ether of hydromorphinol so it is included in Schedule I to the CSA.

United Nations: Hydromorphinol is listed on Schedule I to the Single Convention. The ethers of substances listed on this schedule are also included in the schedule.

7,8-Dihydro-14-hydroxycodeine is the 3-methyl ether of hydromorphinol so it is included in Schedule I to the Single Convention.

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 (methylnorphine)
- (3) Morphine (7,8-didehydro-4,5-epoxy-17-methylmorphinan-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 listed substances.

Structurally, the first three substances listed in item 1 of Schedule I all contain the 4,5-epoxy-17-methylmorphinan nucleus. All of the other 27 listed specifically on Item 1 also contain the 4,5-epoxy-17-methylmorphinan nucleus.

Hydromorphenol is subitem 1(16) of Schedule I.

Item 1 of Schedule I has been interpreted to include a broad range of chemicals similar to the three main opium alkaloids: codeine, morphine and thebaine. In recent years, several substances similar to the title substance have been declared to be controlled substances. These include 14-hydroxycodeine, 14-hydroxymorphine, codeine N-oxide and isocodeine. See the administrative List of Controlled Substances.

Considering the close structural similarity of 7,8-dihydro-14-hydroxycodeine to hydromorphenol, it must be considered to be included in item 1 of Schedule I.

Recommendation: 7,8-Dihydro-14-hydroxycodeine is included in item 1 of Schedule I to the CDSA and is a controlled substance.

January 6, 2008