

Drug Status Report

Drug: Norhydromorphone

Drug Name Status: Norhydromorphone is a common name.

Chemical Name: 4,5alpha-Epoxy-3-hydroxy-morphinan-6-one

Chemical structure:



Molecular Formula: C₁₆H₁₇NO₃

Pharmacological class / Application: Opium related substance

International status:

US: The drug is not included specifically in the Schedules to the CSA. It is not mentioned on the DEA website.

The term "narcotic drug" is defined in the CSA as "any of the following whether produced directly or indirectly by extraction from substances of vegetable origin, or independently by means of chemical synthesis, or by a combination of extraction and chemical synthesis:

(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."

Opiate is also defined in the CSA as "any drug or other substance having an addiction-forming or addiction-sustaining liability similar to morphine or being capable of conversion into a drug having such addiction-forming or addiction-sustaining liability.

DEA would need to confirm whether norhydromorphone is included in the schedules to the CSA.

United Nations: The opiates are included in Schedules I and II to the 1961 convention. The status of Norhydromorphone would need to be verified with the INCB.

Canadian Status: Item 1 of Schedule I to the CDSA is “Opium poppy (*Papaver somniferum*), its preparations, derivatives, alkaloids and salts” and includes morphine and its “salts, derivatives and salts of derivatives”. There follows a list of many opiates.

Hydromorphone (structure above) is subitem 1(17) of Schedule I. Due to the similarity of norhydromorphone to hydromorphone, it must be considered to be included in item 1 of Schedule I.

Structurally, norhydromorphone can also be considered to be included in item 10 of Schedule I, “Morphinans, their salts, derivatives and salts of derivatives”.

Recommendation: Norhydromorphone is included in Item 1 of Schedule I to the CDSA and is a controlled substance.

May 30, 2008