

Drug Status Report

Drug: Nabilone related substances

I-

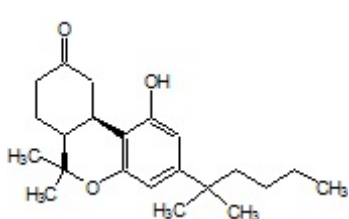
(+/-)-cis-1-Hydroxy-3-(1,1-dimethylpentyl)-6,6-dimethyl-6,6a,7,8,10,10a-hexahydro-9H-dibenzo[b,d]pyran-9-one

II- (+/-)-trans-1-Hydroxy-3-(1,1-dimethylpentyl)-6,6-dimethyl-6,6a,7,8,10,10a-hexahydro-9H-dibenzo[b,d]pyran-9-one

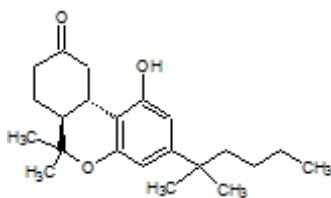
III- 5-(1,1-Dimethylpentyl)resorcinol

Drug Name Status: These are the chemical names.

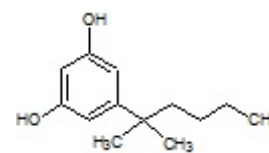
Chemical structure:



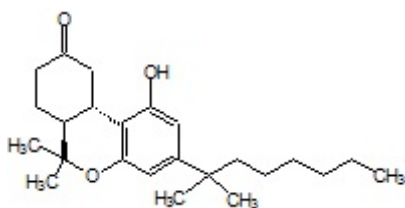
I



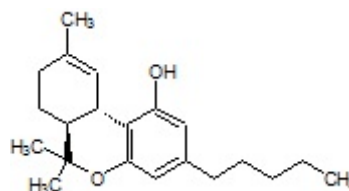
II



III



Nabilone



Delta9-THC

Molecular Formula: I- $C_{22}H_{32}O_3$

II- $C_{22}H_{32}O_3$

III- $C_{13}H_{20}O_2$

Pharmacological class / Application: pharmaceutical related substance

International status:

US: The substances are not currently listed on the US Controlled Substances Act and are not mentioned on the DEA website. However, nabilone is listed on Schedule II to the CSA. The

analogue provision of the CSA, "controlled substance analogue means a substance- (I) the chemical structure of which is substantially similar to the chemical structure of a controlled substance in schedule I or II" therefore applies. The DEA would have to confirm the status of this substance under the CSA.

United Nations: The substances are 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: The substances are not listed specifically on the CDSA. Item 1 of Schedule II to the CDSA includes, "Cannabis, its preparations, derivatives and similar synthetic preparations." This item includes, in addition to the well known components of cannabis, other substances similar in structure to the classical cannabinoids. OCS has made decisions that ajulemic acid, canbisol, O2545, L-759633 and L-759656 were included in Schedule II to the CDSA because they were "similar synthetic preparations" within the meaning of the heading to item 1 of Schedule II.

The structures of nabilone (subitem 1(5) of Schedule II) and Δ^9 -THC are shown above to illustrate that (I) and (II) have a ring structure very similar to them. Based on their structure (I) and (II) should be considered similar synthetic preparations to the cannabinoids.

On the other hand, III clearly consists of only a portion of the characteristic cannabinoid structure.

Several nabilone related substances were reviewed in status reports named, "nabilone precursor", "nabilone related substances" and "nabilone related substances 2".

Recommendation: (I) and (II) are included in item 1 of Schedule II to the CDSA and are controlled substances.

III is not included in item 1 of Schedule II and is not a controlled substance.

August 23, 2008