

## Drug Status Report

**Drug:** Nabilone related substances

NAB-05

NAB-06

Cis-Nabilone (Cis-NAB-00)

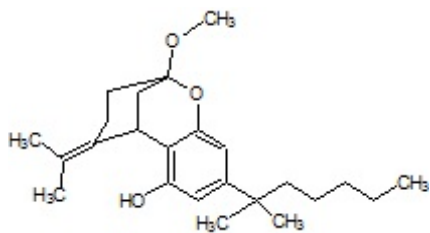
**Drug Name Status:** NAB-05; NAB-06; Cis-Nabilone (Cis-NAB-00) are common names.

**Chemical Names:**

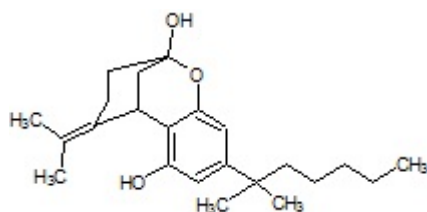
(I) - (±)-9-(1,1-dimethylhexyl)-3,4,5,6-tetrahydro-5-isopropylidene-2-methoxy-2,6-methano-2H-1-benzoxocin-7-ol

(II) - (±)-9-(1,1-dimethylhexyl)-3,4,5,6-tetrahydro-5-isopropylidene-2,6-methano-2H-1-benzoxocin-2,7-diol

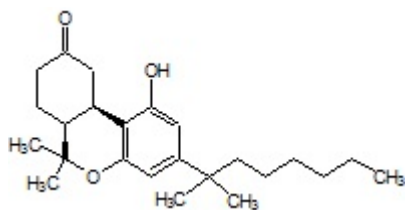
**Chemical structure:**



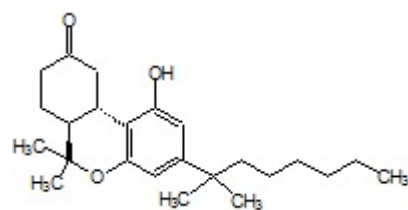
I



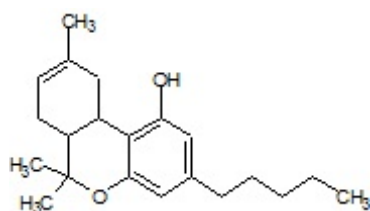
II



Cis-Nabilone



Nabilone



delta8-THC

**Molecular Formula:** (I)  $C_{24}H_{36}O_3$

(II)  $C_{23}H_{34}O_3$

Cis-Nabilone  $C_{24}H_{36}O_3$

**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.

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: (I) and (II) 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 and  $\Delta^8$ -THC are shown above to illustrate that (I) and (II) have a different ring structure in comparison to the cannabinoids. Based on their structure (I) and (II) should not be considered similar synthetic preparations to the cannabinoids.

On the other hand, Cis-Nabilone is clearly an isomer of nabilone and must be considered to be included in item 1 of Schedule II.

Recommendation: (I) and (II) are not included in item 1 of Schedule II to the CDSA and are not controlled substances.

Cis-Nabilone is included in item 1 of Schedule II and is a controlled substance.

July 23, 2008