



STATUS DECISION OF CONTROLLED AND NON-CONTROLLED SUBSTANCE(S)

Substance: Methasterone

Based on the current information available to the Office of Controlled Substances, it appears that the above substance is:

Controlled X
Not Controlled [ ]

under the schedules of the Controlled Drugs and Substances Act (CDSA) for the following reason(s):

- Methasterone is closely related structurally to mebolazine (item 23(19)) and may even represent the active moiety in mebolazine. Methasterone has inherent anabolic activity1. It was found to be a potent orally active anabolic agent in rat.

Supporting document(s) attached: X ( Drug Status Report by Mr. LeBelle's)

Prepared by: Xiao Peng Feng Date: May 18, 2006

Drug Status Report by: MICHAEL LEBELLE Date: May 17, 2006

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_
DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES



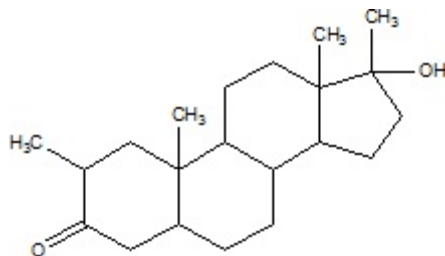
## Drug Status Report

**Drug:** Methasterone

**Drug Name Status:** Methasterone is the common name.

**Chemical Name:** 17beta-Hydroxy-2alpha,17-dimethyl-5alpha-androstan-3-one

**Chemical structure:**



**Molecular Formula:**  $C_{21}H_{34}O_2$

**Pharmacological/chemical class / Application:** Anabolic steroid

**International status:**

US: The substance is not listed on the US Controlled Substances Act and is not mentioned on the DEA website. However, the definition of anabolic steroid in the Act includes, “any drug or hormonal substance, chemically and pharmacologically related to testosterone (other than estrogens, progestins, and corticosteroids) that promotes muscle growth.” The DEA would need to confirm the status of the substance under the CSA.

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: Methasterone is not listed specifically in item 23 of Schedule IV to the CDSA, “Anabolic steroids and their derivatives.” Methasterone is closely related structurally to mebolazine (item 23(19)) and may even represent the active moiety in mebolazine. Methasterone has inherent anabolic activity<sup>2</sup>. It was found to be a potent orally active anabolic agent in rat.

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<sup>2</sup> Ringold, H. J.; Batres, E.; Halpern, O.; Necochea, E. Journal of the American Chemical Society (1959), 81, 427-32.

Recommendation: Methasterone is included in item 23 of Schedule IV to the CDSA and is a controlled substance.