



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

Substance: Norecgonine Methyl Ester

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

Controlled [checked]
Not Controlled [unchecked]

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

- The substance is an ester of norecgonine and therefore is included under norecgonine as a derivative of cocaine and controlled under item 2(2) of Schedule I to the CDSA.

Prepared by: Evelyn Soo Date: Oct 19th 2010

Verified by: Marianne Tang Date:

Approved by: DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES Date:

This status was requested by: third party information removed as per agreement with applicant

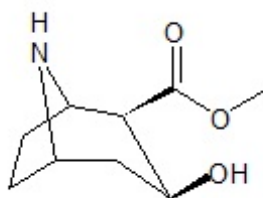
## Drug Status Report

**Drug:** Norecgonine methyl ester

**Drug Name Status:** Norecgonine methyl ester is the common name.

**Chemical Name:** (1R,2R,3S,5S)-3-hydroxy-8-azabicyclo[3.2.1]octane-2-carboxylic acid methyl ester; 1 $\alpha$ H, 5 $\alpha$ H-Nortropane-2 $\beta$ -carboxylic acid methyl ester; [1R-(exo,exo)-3-Hydroxy-8-Azabicyclo[3.2.1]octane-2-carboxylic acid methyl ester

**Chemical structure:**



**Molecular Formula:** C<sub>9</sub>H<sub>15</sub>NO<sub>3</sub>

**CAS-RN:** 28393-47-7

**Pharmacological class / Application:** Derivative of cocaine

**International status:**

US: The substance is not currently listed on the US Controlled Substances Act and is not mentioned on the DEA website.

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: Norecgonine methyl ester is not listed specifically in the CDSA. However, norecgonine is a minor urinary metabolite of both norcocaine<sup>1</sup> and cocaine<sup>2</sup>. Cocaine is listed as sub-item 2 under item 2 of Schedule I to the CDSA, under the heading "Coca (Erythroxylo), its

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<sup>1</sup>Misra AL et al. (1976) Disposition and metabolism of 3HCocaine in acutely and chronically treated dogs, *Xenobiotica*, 6:537-552.

<sup>2</sup>Misra, AL. et al. (1976) Disposition and metabolism of [3H]cocaine in acutely and chronically treated dogs, *Xenobiotica*, 6:537-552.

preparations, derivatives, alkaloids and salts, including:”. An earlier review of norecgonine determined that substance was included under item 2(2) of Schedule I as a derivative of cocaine. According to the UN 1961 Convention on Narcotic Drugs, the inclusion of a substance as a narcotic extends to include the corresponding esters and ethers. Therefore, norecgonine methyl ester would also be included under norecgonine and controlled under item 2(2) of Schedule I to the CDSA.

**Recommendation:** Norecgonine methyl ester is included under item 2(2) of Schedule I to the CDSA and is a controlled substance.

**Date:** 19 October 2010