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

Substance:  6-Desmethyldemconine

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

- Controlled  ✔️
- Not Controlled  ☐

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

- The substance is a metabolite of narcotine (noscapine) and is controlled under Item1 of Schedule I to the CDSA.

Prepared by:  ______________________________          Date:  ____________
              Evelyn Soo

Verified by:  ______________________________         Date:  ____________
              Mark Kozlowski

Approved by: ______________________________     Date:  ____________
            DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by: “third party information removed as per agreement with applicant”
Drug Status Report

Drug: 6-Desmethylmeconine

Drug Name Status: 6-Desmethylmeconine is the common name.

Chemical Name: 6-hydroxy-7methoxyphthalide

Other Names: 6-hydroxy-7-methoxy-1(3H)-isobenzofuranone

Chemical structure:

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\begin{center}
\includegraphics[width=0.5\textwidth]{chemical_structure.png}
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Molecular Formula: $C_{9}H_{8}O_4$

CAS-RN: 78213-30-6

Pharmacological class / Application: Pharmaceutical-related substance

International status:

US: 6-Desmethylmeconine is not listed on the schedules to the US Controlled Substances Act and is not mentioned anywhere on the DEA website.

United Nations: The substance is not listed on the Yellow List - List of Narcotic Drugs under International Control, the Green List - List of Psychotropic Substances under International Control, nor the Red List - List of Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances Under International Control.

Canadian Status: 6-Desmethylmeconine is not currently listed in the schedules to the CDSA. The substance has been reported in the scientific literature to be a metabolite of noscapine\(^1\) and is

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\(^{1}\) El-Haj, BM et al. (2007) GC-MS detection and tentative characterization of two noscapine metabolites in human urine and their potential as markers for opium and illicit heroin use, Foren. Toxicol. 25:22-29.
often used as in forensic analysis as a marker for the illicit use of heroin use \(^2\). Noscapine is currently excluded from Schedule I to the CDSA and is listed as sub-item 1(35) “Narcotine (6,7-dimethoxy-3-(5,6,7,8-tetra-hydro-4-methoxy-6-methyl-1,3-dioxolos [4,5-g]isoquinolin-5-yl)-1(3H)-isobenzofuranone). While narcotine (noscapine) is specifically excluded from the CDSA, the heading of item 1 of Schedule I is “Opium Poppy (Papaver somniferum), its preparations, derivatives, alkaloids and salts including:”. As a metabolite of narcotine, 6-desmethylmeconine is considered included under item 1 of Schedule I to the CDSA as a derivative of narcotine. It is noteworthy that previous status decisions on similar substances (e.g. the metabolites and derivatives of apomorphine, naltrexone and naloxone) found such derivatives to be included under item 1 of Schedule I to the CDSA.

**Recommendation:** 6-Desmethylmeconine is included in Item 1 of Schedule I to the CDSA and is a controlled substance.

**Date:** August 31st, 2011

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