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

Substance: Docosatetraenylethanolamide

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):

- The substance is an endocannabinoid showing CB1 cannabinoid receptor agonist activity and is included under item 1 of Schedule II to the CDSA.

Prepared by: _______________________________ Date: _______________

Zack Li

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: Docosatetraenylethanolamide

Drug Name Status: Docosatetraenylethanolamide is the common name.

Chemical Name: 7,10,13,16-Docosatetraenamide, N-(2-hydroxyethyl)-, (all-Z)-

Other Names: DEA; 7,10,13,16-Docosatetraenylethanolamide; DTEA

Chemical structure:

\[
\begin{align*}
\text{Molecular Formula:} & \quad \text{C}_{24}\text{H}_{41}\text{NO}_2 \\
\text{Pharmacological class / Application:} & \quad \text{Endocannabinoid} \\
\text{CAS-RN:} & \quad \text{150314-35-5}
\end{align*}
\]

International status:

US: Docosatetraenylethanolamide is not listed specifically in 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: Docosatetraenylethanolamide is not listed specifically in the CDSA. The substance is an endocannabinoid and in studies evaluating its analgesic effects, docosatetraenylethanolamide has been found to demonstrate agonist activity at the CB\textsubscript{1} cannabinoid receptor (\(K_i = 253.4 \pm 41.1\) nM)
\(^1\). Cannabinoid receptor agonists have been declared included under item 1 of Schedule II to the CDSA whereas cannabinoid receptor antagonists have been specifically excluded. Given that docosatetraenylethanolamide demonstrates cannabinoid receptor agonist activity, it must be included under item 1 of Schedule II to the CDSA

Recommendation: Docosatetraenylethanolamide is included in item 1 of Schedule II to the CDSA and is a controlled substance.

Date: May 30th, 2012.